HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 18, NO. 1, ABSTRACTS 1-155. JANUARY 1978

LONDON: HER MAJESTY'S STATIONERY OFFICE

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First published 1978

ISBN 0 11 722628 9
ISSN 0018 5507

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HOSPITAL ABSTRACTS

Vol. 18 January, 1978 No. 1

HOSPITALS IN OTHER COUNTRIES

1. ROBINSON, W. **Nursing in Gibraltar.** *Nursing Mirror*, Sutton, 1977, Sept. 22, vol. 145, no. 12, pp. 6-9.

This paper describes the health services in Gibraltar. Until recent years all nurses had to train in the United Kingdom and although there is now a school of nursing, the course is not recognised by the General Nursing Council. Thus nurses trained in Gibraltar then have to apply to the General Nursing Council to become State Registered or State Enrolled Nurses. It is felt that the health and welfare services in Gibraltar are unique and of a very high standard. They are provided by a large health centre, which makes a small charge for all house or surgery visits and prescriptions, and a 180-bed hospital with medical, surgical, maternity and geriatric departments and an isolation unit. In addition the hospital runs an out-patient department. There is also a psychiatric hospital with a flourishing occupational therapy department, three residential homes for the elderly and a school health and child welfare service dealing with 5,000 children. Finally a special school for physically and mentally handicapped children was opened recently and encourages the children to become more independent. When necessary patients are sent to two London hospitals for treatment that cannot be given on the Island and a number of specialists visit Gibraltar annually to supplement the existing services.

2. KRATZ, C. R. **New ideas in old institutions.** *Nursing Times*, London, 1977, Oct. 6, vol. 73, no. 40, pp. 1559-1561.

This is a description of the work of the Lindenhof hospital in Berne, Switzerland, resulting from discussions with the Oberin (head of the hospital) and a nurse tutor. The hospital, established in 1899, is owned by the Swiss Red Cross and exists primarily to train nurses. Potential students undergo a rigorous selection procedure, administered jointly by the Oberin and the Director of Nurse Education, which almost eliminates student wastage. There are two intakes a year of 100 students overall for the basic nurse training course lasting three years. Practical training is given at 'out stations' or hospitals which may vary in size. Great emphasis is placed on team nursing, employing patient rather than task allocation techniques, with a one-to-one patient/nurse ratio. Staff consultation is very important in the administration of the hospital involving student nurses and auxiliaries as well as more senior staff.

3. BÖHN, L. Plejehjemsassistenters uddannelse og arbejdsopgaver: retningslinjerne for opgaver udtrykker en assisterende funktion. **[Guidelines on the training, duties and role of the nursing-home assistant.]** *Sygeplejersken*, København, 1977, April 20, no. 15, pp. 4-6.

Trained nursing-home assistants have existed as a staff category for ten years, and there are now some 1,800 of them in Denmark. Their duties comprise: (i) assistance in planning patient care; (ii) nursing the inmates and making them feel at home; (iii)

contributing to contact with patients and the public; (iv) nursing sick patients and assisting in preventative care; and (v) economic use of the nursing-home's resources. Training comprises a six-month basic course on medical and surgical wards, as a nursing auxiliary, an 18-month training course involving practical experience of somatic and psychiatric nursing and a 19-week theoretical course. Students are paid about £100 a week during training, but have to pay for their own books. The theoretical course comprises the five main subject groups: (i) psychology and paedagogics; (ii) medicine and nursing; (iii) social studies and rehabilitation; (iv) human relations; and (v) administration. The schools of nursing train nursing-home assistants to take over group leadership functions in nursing homes, but they are largely employed in subordinate roles. In the author's opinion, nursing-home assistants are covered by Category two of the three categories in WHO Technical Reports Series No. 347, Fifth Report, p. 14, despite the fact that inmates of nursing homes must not be regarded as patients but as tenants of accommodation where assistance is available if required.

PLANNING, DESIGN AND CONSTRUCTION

HOSPITAL DESIGN

See Abstract No. 5

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

4. **British hospitals home and overseas.** 13th edition. Maidstone, Whitehall Press, 1977, 48pp. £2.00

This thirteenth edition clearly sets out the various hospital services available and illustrates projects completed in the hospital field. Plans are included of hospitals in the United Arab Emirates, Greece and the Phillipines, together with 11 from the United Kingdom. Lists of names of architects for hospital projects, consulting engineers and building and engineering contractors are included.

ENTRANCES, CORRIDORS AND STAIRWAYS

See Abstract No. 6

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

5. WINNING, J. W. **What should the designer do?** *Hospital Engineering*, London, 1977, Aug., vol. 31, no. 6, pp. 7-10.

To arrive at an adequate digest of what the designer of building services should do, a

small working group considered a sequence of activities carried out by the designer from the receipt of the service planning brief to tender. This discussion therefore does not dwell on installation work, though it does acknowledge the need to specify and detail for this stage. Aspects discussed are: the brief; project team work—commissioning input to the management control plan; design information, preparation and storage; the quality of design information; and handicaps to commissioning.

TRANSPORT IN GENERAL

See Abstract No. 85

VENTILATION AND AIR-CONDITIONING

See also Abstract No. 75

6. LIDWELL, O. M. **Air exchange through doorways. The effect of temperature difference, turbulence and ventilation flow.** *Journal of Hygiene*, London, 1977, Aug., vol. 79, no. 1, pp. 141-154.

Analytical expressions are derived for the exchange of air across doorways or similar apertures, in terms of the temperature difference between the spaces on both sides of the opening and the net volume of air flowing through this as a result of unbalanced air supply or extract. A simple allowance for turbulence which gives reasonable correspondence with observation is included. The formulae, which assume complete air mixing on both sides of the doorway up to the plane of the aperture, predict overflows from the warmer side, when there is an excess air supply to this side, which are progressively smaller than those observed as the temperative difference rises above two to three degrees C and the volume of excess air supply increases to produce an averaged outflow velocity greater than 0.1 to 0.15 m/s. This seems to be due to lack of mixing of the warm outflowing air with the cooler air mass. A correction factor for this can be deduced as a function of the pressure difference due to the excess air supply. The limiting magnitude and general form of this function are compatible with a simple theoretical model of the air flow patterns involved.

EQUIPMENT, FITTINGS, FURNITURE

INTERIOR DECORATION

7. **Paralyzed VA patients create a mural for their dayroom.** *Hospitals*, Chicago, 1977, July 1, vol. 51, no. 13, pp. 69-71.

The patients of a 40-bed ward of the spinal cord injury service at the 1,440-bed Veterans Administration Hospital, Hines, Ill., planned, created and arranged the dedication of a mural to decorate their 22 feet by 30 feet day room. The project was supervised by an ad hoc committee, including four patients, under the guidance of a professional muralist. A coloured photograph of part of the brightly coloured mural is reproduced.

FLOORS AND FLOOR COVERINGS

See Abstract No. 77

BEDS, COTS, ETC.

8. CORLESS, D. **A cheap electro-pneumatic high-low bed.** *Age and Ageing*, London, 1977, Aug., vol. 6, no. 3, pp. 175-178.

A cheap, simple, variable height bed for use in wards without a compressed air supply is described. The methods of operating the bed are outlined. The main design feature is ease of operation to ensure that the bed is at the correct height for the patient and nurse and to waste as little as possible of the nurse's time.

EQUIPMENT GENERALLY

See Abstract No. 104

MEDICAL EQUIPMENT

See Abstract No. 38

ELECTRONIC EQUIPMENT

See Abstract No. 113

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 17, 18

RECRUITMENT

See Abstract No. 12

CONDITIONS OF SERVICE

See Abstract Nos. 13, 151

STAFF MANAGEMENT

See also Abstract Nos. 13, 39, 47

9. SCHEIN, L. **Staff participation in governance.** *Administration in Mental Health*, Rockville, 1977, vol. 4, no. 2, pp. 60-66.

The author discusses staff representation in policy making in a psychiatric health centre or clinic by means of a governing council. Subject to the agreement of the board

of directors, the council may formulate policies relating to quality of care, professional standards and staffing. The council is made up of representatives of administrators, directors of service, supervisors, facilities and staff, elected either by each department or by levels of representation. The administrators have special responsibilities on the council, including: (i) the presentation of long and short range plans; (ii) the submission of proposals for change; and (iii) the implementation of policies which have been approved. A particular example is given to demonstrate the policy-making procedure. As an objective process, representative staff participation can provide efficiency and high quality professional service. On a personal level, it encourages communication between administrative and professional staff in recommending policy changes.

STAFF TRAINING

See Abstract Nos. 2, 19-25, 31, 37, 82, 93, 120

STAFF WELFARE

See Abstract No. 72

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

10. MORRISON, J. K., PITCHFORD, B. and SMITH, F. J. **The mental health administrator and evaluation.** *Administration in Mental Health*, Rockville, 1977, vol. 4, no. 2, pp. 78-82.

Administrators in psychiatric institutions should carry out systematic evaluation of performance to achieve improved management. Obstacles to evaluation include: (i) resistance from clinical staff; (ii) a shortage of trained evaluators; and (iii) lack of computer systems. The larger the institution the more carefully the evaluation system must be planned. The team leader must believe in and know about evaluation and be able to sell the idea to others by holding meetings and workshops. Senior medical staff may be more willing to participate in evaluation when it helps to justify their particular projects and increases general efficiency. The administrator should: (i) organize any outside help from analysts and statisticians; (ii) ensure agreement on the design of the evaluation project; (iii) co-ordinate the analysis and documentation of results; and (iv) ensure that staff know the results of a study and how to apply them to clinical practice.

MEDICAL STAFF

See also Abstract Nos. 93, 122

11. DULAKE, L. **Doctors, practices and hospitals through 300 years: a history of general and hospital practice at Reigate and Redhill, including Earlswood and Merstham.** Reigate, the Author, 1976, iv, 153pp.
Cover title: the doctor's tale, 1662-1975.

This book describes the evolution of general and hospital practice in the borough of

Reigate, Surrey, during the last 300 years. The book is in two parts, Part I describes three centuries of change with biographical notes of most of the doctors named, and Part II presents a brief account of a provident dispensary, each hospital in the borough, and biographical notes on those engaged in public health and the control of tuberculosis. A bibliography, glossary, subject and author index are included together with several appendices.

12. MAYNARD, A. and WALKER, A. **A critical survey of medical manpower planning in Britain.** *Social and Economic Administration*, Oxford, 1977, vol. 11, no. 1, pp. 52-75.

This paper is a critical appraisal of the attempts that have been made to plan the supply of medical manpower in the United Kingdom, starting with the report of the Willink Committee in 1957. The four sections of the paper cover: (i) the rationale and problems of manpower planning in the health field; (ii) the procedures adopted by those involved in forecasting; (iii) an examination of the outcomes predicted and the extent to which they were met; and (iv) the means available for improving the accuracy of forecasts. The performance of the forecasters has been poor, calling into question the allocation of scarce resources to apparently fruitless endeavours. However, it is unlikely that the public agencies will be able to forego involvement in such work. It is to be hoped, therefore, that their resource intensive attempts to supplement the workings of the market will be carried out using improved techniques and with greater frequency than hitherto.

13. GUIMAÎTRE, B. Les relations du travail dans les hôpitaux publics. **[Staff relations in public hospitals.]** *Revue Française des Affaires Sociales*, Paris, 1977, April/June, vol. 31, no. 2, pp. 3-13.

The author describes the conditions of service and recruitment of medical staff and administrators in French public hospitals. Each medical department has a consultant at its head, and he has a deputy and several assistants; the majority of appointments are full-time. There are disparities between the status of doctors in university and non-university hospitals. This is also true for administrative staff; moreover the administrators' salaries do not reflect their responsibilities. Younger administrators are not attracted to the smaller hospitals and often opt for the private sector once their eight-year contract with the State has expired. The composition and functions of the hospital management committee are also described and the author discusses the conflicts which arise between the committee and the chief administrator because of the way in which responsibility is divided between them. The non-medical staff are poorly represented on the committee (two out of 22 members in a university hospital). The Hospital Federation of France acts as a pressure group on behalf of the non-medical staff. Its objectives also include improvements in the quality of care and the study of hospital problems.

14. DUBACH, U. C. and RECHENBERG, K. N. von. Krankheitsverständnis und Patienten-Arzt-Beziehung in der Ambulanz. **[The patient's understanding of his illness and the patient-doctor relationship in the out-patient clinic.]** *Deutsche Medizinische Wochenschrift*, Stuttgart, 1977, Sept. 2, vol. 102, no. 35, pp. 1239-1244.

At the Basel University Hospital medical out-patient clinic 96 randomly selected

patients were interviewed with the object of testing the quality of medical information given to patients. Of the patients, 88 were told their diagnosis and later 76 named this diagnosis correctly: understanding of their illnesses was found to be good in 55 per cent of cases, average in 26 per cent and poor in 19 per cent. Patients' basic medical knowledge was tested with 25 medical terms familiar to laymen: half of the questions were answered correctly. Half of the patients complained of lack of understanding of the explanation about these illnesses, largely because of the Latin terms used by doctors. Better medical information for the public and more careful explanation by doctors are essential if the patient is to have a proper understanding of his illness.

NURSING STAFF

See also Abstract Nos. 1-3, 26, 40, 47, 101, 151

15. ROPER, N. **Justification and use of research in nursing.** *Journal of Advanced Nursing*, Oxford, 1977, July, vol. 2, no. 4, pp. 365-371.

Research can be justified on the grounds of originality leading to a substantial addition to the nursing profession's body of knowledge and also on the grounds of replication which can provide credence to generalization from the original study. Other justifications are economy of effort for nurses as well as patients, economy of material resources, research-based nursing practice and improvement in the nursing curriculum and in manpower planning. Illustrative studies are quoted. The objective of all nursing research is directly or indirectly to improve the quality of nursing, but how this is measured remains a problem.

16. **Nursing in Europe: Denmark.** *Nursing Mirror*, Sutton, 1977, Sept. 8, vol. 145, no. 10, pp. 16-18.

This article is part of a series dealing with nurse education in EEC countries. Basic nurse education courses in Denmark last approximately three and a half years and give both theoretical and clinical training. Minimum entry age to the courses is 18 years and both men and women are accepted. In selecting students emphasis is placed on a good school education with a satisfactory knowledge of Danish, arithmetic, physics and chemistry. The block system of education is used, and at least 1,500 hours of theoretical instruction must be given. Clinical experience is given in medical, surgical, psychiatric, paediatric, and obstetric departments and operating theatres. In addition a period of observation in public and community nursing services is included. At the present time a revision of the education system is under way and will include reforms in the areas of employment, salary, pensions, the right to negotiate and professional ethics.

17. AULD, M. G. **How many nurses? A method for estimating the requisite nursing establishment for a hospital.** *Nursing Times*, London, 1977, Aug. 4, vol. 73, no. 31, occasional papers, p. 108.

The object of the study was to establish a method for determining nurse/staffing/patient ratios in an Edinburgh maternity hospital, which could be adapted for use in other hospitals. The steps taken to obtain the necessary information included: (i) grouping patients in categories; (ii) listing and timing nursing requirements for each

patient; (iii) deciding which grade is appropriate to each nursing task; (iv) determining from past admissions the likely weekly admissions; (v) determining the nursing establishment on the basis of number of patients and the training requirements of midwives. Information collected included: (i) calculations of admissions; (ii) a list of timed nursing activities; (iii) graphs showing bed occupancy; and (iv) diaries kept by patients of activities undergone in a day and the grade of staff involved. The author concludes that patients are not receiving the care they need, and/or nursing resources are badly allocated and organized.

18. MOORES, B. and WOOD, I. **Nursing allocation using a time-shared computer.** *Nursing Times*, London, 1977, Aug. 18, vol. 73, no. 33, occasional papers, pp. 109-112.

Use was made of a time-shared computer system in analysing staff allocation and bed usage in a children's hospital. Nurse allocation data were retrieved for each of 12 months and the number of four-hour nursing spans between 8 a.m. and 8 p.m. extracted from off-duty lists. The midnight bed count was recorded. It is possible to investigate nurse allocation in detail by examining the cover given on each ward by each grade of nurse. Programs were written to provide four forms of presentation, examples of which are given. A study of the print-outs for the hospital as a whole led to the following observations: (i) admission of children at weekends is discouraged; (ii) numbers of qualified and unqualified staff drop substantially at the weekend; and (iii) the total number of staff available varies by a greater amount than the change in bed occupancy.

19. ALTSCHUL, A. **Professional nursing.** *Nursing Mirror*, Sutton, 1977, Sept. 8, vol. 145, no. 10, pp. 7-9.

This article is the first part of the inaugural lecture delivered by Professor Annie Altschul, the new head of the Department of Nursing Studies at Edinburgh University. The lecture centres around Professor Altschul's beliefs concerning nursing and how they are likely to effect the manner in which she deals with some of the problems currently facing the Department. After outlining the present programme of the Department she deals with her attitudes to a number of problems. The topics include the need to regard nursing as a profession and how the present lack of a scientific foundation in nurse education tends to undermine this. The place of specialisation in nursing, and her own experience in the care of the mentally ill and handicapped are discussed. She claims that an increasing involvement in postgraduate education and research will help to resolve the dilemma of professional identity. Finally she deals with the failure of the work of the World Health Organisation in attempting to impose standard role definitions in nursing and how the emphasis has changed to deciding which skills are essential to the work of the nurses.

20. HARRISON, J., SAUNDERS, M. E. and SIMS, A. **Some structural considerations in modular education for basic nursing students.** *Journal of Advanced Nursing*, Oxford, 1977, July, vol. 2, no. 4, pp. 383-391.

The aims of modular educational programmes and the means and structure adopted to meet those aims are outlined. Based on interviews with students, teachers and ward staff, in addition to examination of ward staffing levels and structures, the paper

describes the streaming of students, the possible effects of modular education on staffing, and some changes introduced and proposed by four hospitals running such schemes. For the most part, streaming was seen as being feasible but without any real advantages. Small drawbacks associated with streaming were, however, evident. The study suggested that many of the staffing difficulties associated with modular education were not created by the scheme of training but perhaps highlighted by it. Improvements which would both increase the effectiveness of the schemes and reduce some of these difficulties included movement towards more frequent intakes, a reduction in the length of the classroom-based element of the introductory course and abandonment of streaming and changes in the length/location of certain modules.

21. **Objectives of undergraduate/baccalaureate nursing education: an international review.** *Journal of Advanced Nursing*, Oxford, 1977, July, vol. 2, no. 4, pp. 405-413.

In view of the growth and extension of nursing programmes in universities and other centres of higher education throughout the world, a number of nursing faculty members were invited to send details of the objectives of their undergraduate/baccalaureate courses. The replies are presented here for consideration and discussion. They come from nine universities in seven countries.

22. ALLAIRE, C. **Nursing in Europe: France.** *Nursing Mirror*, Sutton, 1977, Oct. 6, vol. 145, no. 14, pp. 38-40.

This article describes nurse education in France and is part of a series concerned with general nurse education in the EEC countries. It is estimated that 16,000 state diplomas will be awarded in 1977, rising to 25,000 in 1980. The basic nurse training course in France lasts 28 months culminating in the State Diploma of Nursing. The minimum entry age is 17 and all candidates, except those with baccalaureates, are expected to pass an entrance examination which is designed to test general education and nursing aptitude. Since 1970 tuition is free as the Ministry of Health gives grants to training schools. Career opportunities are either in practical nursing or teaching and the main areas of specialization are paediatrics, anaesthetics or operating theatres.

23. SALLING, A.-L. Uddannelsesafdelingen på Odense Sygehus: viden og impulser der styrker den faglige interesse. **[The Training Department at Odense Hospital: new ideas and stimuli increase nurses' interest in their profession.]** *Sygeplejersken*, København, 1977, May 18, no. 19, pp. 4-6, 23.

The Training Department at Odense Hospital is administered by matron and run by a sister and sister tutor. Among the courses offered are: (i) a three-month supplementary course for 24 ward sisters and their First Assistants; (ii) refresher and up-grading courses for 24 at a time of the hospital's 1,100 nurses. This course demands three years' previous nursing experience and lasts two months; (iii) a fortnight's follow-up course on, e.g. theatre technique and safety precautions for theatre nurses; and (iv) a 140-hour course in anaesthesia and intensive care for nurses already in anaesthesiological departments. All the above courses are open to nurses throughout the County. In addition, the Department offers a series of short courses for the hospital's own staff on, e.g. method of instruction; blood transfusion; care of respirator cases; and supervisory techniques for senior nursing officers. Much stress is laid on group work and discussions, and participation in these courses has proved to act as a stimulus for

applications to courses at The National School of Advanced Nursing (*Danmarks Sygeplejerskehøjskole*). The article is illustrated with five photographs of students at work on the course.

24. TIETZE, H. Efteruddannelse af sygeplejersker til lederstillinger ved plejehjem: kontinuerlig efter- og lederuddannelse er en nødvendighed. **[Continuing management training of hospital nurses for administrative posts in nursing homes is essential.]** *Sygeplejersken*, København, 1977, June 1, no. 21, pp. 16, 23.

Demands are made on the senior staff of nursing homes (matrons, sisters and staff nurses) which they cannot live up to on the basis of the knowledge gained during nursing training alone. The administrative work involved is far more extensive and demanding than is seen in hospital: senior staff must be expert administrators as well as nurses. The Nurses' Oath involves a promise actively to seek improvement of one's knowledge and powers and if so why do so many nurses who have never taken part in supplementary training courses apply for *and get appointed to* senior posts in nursing homes? Is this one of the root causes of public dissatisfaction with conditions in nursing homes? In the County of South Jutland, only three six-week courses have been offered since 1971, for 25 nurses each. The aim of the course is to train nurses to plan and manage a nursing home and its staff, including training. The course programme covers: (i) social psychology; (ii) paedagogics; (iii) pathology, geriatrics and gerontology; (iv) nursing planning; (v) physio-ergotherapy; (vi) special care; and (vii) administration, management and staff psychology. One person is currently responsible for planning and running these courses. In the author's opinion the system is at fault for demanding that graduating nurses swear to seek further training but does not provide post-graduate courses, and happily employs senior nursing staff who have never taken part in any course since qualifying as nurses.

25. RAVE-SCHWANK, M. and STEDEN, H.-P. Die Weiterbildung zur Fachschwester und zum Fachpfleger für Psychiatrie im Landschaftsverband Rheinland. Das Modell und seine Auswirkungen. **[Advanced training programmes for specialized nurses in psychiatry in Rhineland.]** *Psychiatrische Praxis*, Stuttgart, 1977, May, vol. 4, no. 2, pp. 86-93.

This is a detailed account of the first post-basic training course for psychiatric nurses to be held in the Rhineland. It is being attended by 27 senior nurses (17 male and 10 female) from five State psychiatrist hospitals in the *Land*. The course started in November 1975 and consists of five three-week blocks (one in the spring and one in the autumn) spread over two years. This gives a total of 600 hours of theoretical and practical instruction. The course ends with an examination. Details are given of how participants were selected (most had for some years been in charge of a ward), the training given, the effect on the students, and how the costs are met.

26. AUSTIN, R. **Sex and gender in the future of nursing.** *Nursing Times*, London, 1977, Aug. 25, vol. 73, no. 34, occasional papers, pp. 113-116; Sept. 1, vol. 73, no. 35, occasional papers, pp. 117-119.

The feminine image of nursing that has existed for more than 100 years is reviewed. The author then speculates on the effect that may be produced by the increasing number of men who are being appointed to senior posts. She concludes that she can support the

statement that 'the enhanced masculinity of nursing benefits neither the patients who have to suffer it, nor the staff who have to work it, nor the society in which it is located'.

27. ROTHMAN, D. A. and ROTHMAN, N. L. **The professional nurse and the law.** Boston, Mass., Little, Brown & Co., 1977, ix, 185pp. £5.80

The major laws apertaining to the health services and health care in the United States are summarized, and the background and principles necessary for nursing staff to understand legal questions that affect them as professionals are outlined. Aspects covered include: property rights; individual rights; civil law and common law; American government; torts; crimes; nurse practice acts; consumerism and accountability; collective bargaining and the nurse employment contract; social security and the National Health Care Planning Act; death; and wills and decedent's estates.

28. LITTEN, H. **Specialised care 2; infection.** *Nursing Mirror*, Sutton, 1977, Sept. 8, vol. 145, no. 10, supplement, pp. i-iv.

This article deals with some general methods of infection control. The main ways in which infection bacteria and viruses are spread are: by being airborne and thus travelling from host to host; by direct contact; or by indirect contact via clothing and furniture. The chain of infection may be broken by isolation and/or barrier nursing. Isolation may occur in special units or hospitals, or in single rooms in general hospitals. The nurse should take every precaution herself, whilst urging the patient and his relatives to do likewise; it is also important to reassure the patient about his condition and to try to alleviate any anxieties. General protective measures such as the use of gowns, gloves and masks are listed together with some hints on nursing care and personal hygiene for the nurse.

29. CHALMERS, H. **Return to basics 5. Ethics.** *Nursing Mirror*, Sutton, 1977, Aug. 4, vol. 145, no. 5, supplement, pp. i-v.

The new nurse entering the profession has not only to study to attain knowledge but has also to learn to appreciate the aspects of behaviour which are so important in a caring profession. The topics covered in this paper are: uniform; working well with others; relationships with patients; confidentiality; tact and professionalism; and the dying patient.

30. LEYDON, M. I. **Nursing in Europe: Eire.** *Nursing Mirror*, Sutton, 1977, Sept. 15, vol. 145, no. 11, pp. 24-26.

This description of nurse education in Eire is part of a series of articles dealing with nurse education in EEC countries. With a minimum entry age of 17, nursing is a popular career choice in Eire, with ten applicants for each place. Emphasis is placed on a good school education, a reasonable knowledge of English, biology and science subjects, mathematics and an additional language, and, in addition, a variety of selection tests are used. There are 28 general nurse training schools in Eire and a basic nurse education course lasts three years, during which time the student is regarded as part of the workforce and given an allowance. A minimum of 900 hours of theoretical and 4,800 hours of clinical instruction is given and students are expected to pass two

examinations in the course of training. The salary is not regarded as a major incentive for nursing as a career, and promotion and career opportunities are limited.

31. ALTSCHUL, A. **Professional nursing: Part 2.** *Nursing Mirror*, Sutton, 1977, Sept. 15, vol. 145, no. 11, pp. 27-30.

This article by the Professor of Nursing Studies, Edinburgh University discusses the problems facing nursing. It outlines the current policy of the World Health Organisation regarding nursing in developing countries and the inadequacy of UK nurse education for overseas nurses who intend to practise in their native countries. The problem of role overlap or blurring and the development of team work is discussed. In conclusion the author considers the work of the Department of Nursing Studies and feels that its future existence could be justified by: encouraging the acceptance of graduate nurses in administrative and teaching roles; increasing potential leadership by encouraging postgraduate education; developing postgraduate study in clinical areas; encouraging an international exchange of ideas and opinions; and increasing the interest in research through the Nursing Research Unit.

32. BARBENEL, J. C. and others. **Incidence of pressure-sores in the greater Glasgow health board area.** *Lancet*, London, 1977, Sept. 10, vol. ii, pp. 548-550.

This survey, carried out in the Greater Glasgow Health Board area, was made to establish the extent and severity of pressure sores in the area. Patients from both hospitals and the community were included in the survey. The sample was selected on one day in January 1976 with a total 10,751 patients of whom 70% were aged 70 +. A questionnaire was used to assess the patient and to record the site and severity of the sores. These assessments were made either by the ward staff or the community nurse attending the patient. A further survey was carried out to check the assessments made previously to reduce bias; this was done on a random five per cent of the original sample in 21 wards (it proved impossible to check on community patients), by a team of seven experienced nurses not connected with the original survey. It was found that the elderly are the group most at risk of developing pressure sores and that chairfast patients develop more pressure sores than those who are bedfast.

33. GOW, C. M. and WILLIAMS, J. I. **Nurses' attitudes toward death and dying: a causal interpretation.** *Social Science and Medicine*, Oxford, 1977, Feb., vol. 11, no. 3, pp. 191-198.

The problem of caring for the dying has become a significant issue in the health care system. Avoidance behaviour by physicians and nurses, when faced by patients who require long-term care, has become a major concern. The study reported here began with the hypothesis that nurses' attitudes and anxieties about death and dying would be related to the type of agency in which they worked, their reactions to caring for the dying, and their demographic characteristics. A questionnaire was completed by 137 of 404 and 98 of 322 nurses in various agencies in two cities in Ontario to whom it was sent in two separate phases. The low response rates restrict the extent to which the findings can be generalized. Age was an important determinant of nurses' perceptions of death and dying, but agency was not. The results suggest that to modify nurses' attitudes, attention should be focused on the nurses and the attitudes and anxieties they

bring to their work. The key appears to be to modify their attitudes and anxieties either through education or clinical experience.

34. CORPUZ, T. **Primary nursing meets needs, expectations of patients and staff.** *Hospitals*, Chicago, 1977, June 1, vol. 51, no. 11, pp. 95-96, 98, 100.

Faced with cuts in its budget, the nursing department at Evanston (Ill.) Hospital commissioned a work assessment study by industrial engineers and management consultants assisted by a clinical nurse specialist. Four units (two medical, one surgery and one obstetrical/gynaecological) were studies using a work sampling method. One of the findings was that team nursing was not effectively meeting the needs of either patients or staff. Delineation of the desirable end results followed by a series of brainstorming sessions resulted in the introduction of the concept of modular nursing. In this a registered nurse and a nursing assistant provide the care for a group of eight to 10 patients. The structural base of the modular nursing system was adopted as the basis for implementing primary nursing on one nursing unit and gradually extended to others as it proved successful. Aspects of the new system discussed in the paper include the nursing process, continuity of care and the head nurse's role. Evaluation studies showed that the model of primary nursing at Evanston Hospital was the most appropriate approach for meeting the needs and expectations of both the consumer and the nursing staff.

35. HARRISON, M. **Role of the nurse in resuscitation and intensive care.** *Nursing Mirror*, Sutton, 1977, Oct. 6, vol. 145, no. 14, pp. 16-17.

This article examines the role of the nurse in the care of the multiple injury patient. The equipment required for immediate care of these patients is outlined and should include: a suitable bed or trolley; suction apparatus; Boyle's anaesthetic machine; intubation equipment; intravenous infusion trolley; and a stomach washout tray. At this stage two nurses should be in attendance: one to observe the patient and to assist the anaesthetist and another to assist medical staff and prepare equipment. The design, site and policies regarding this equipment are also examined. It is emphasized that students should be properly trained and should be supervised at all times. The decisions and ethical considerations accompanying this type of injury can put much stress on the staff and senior nurses should make every effort to explain the situation and to reassure junior staff. Finally, the nurse should be aware of her responsibilities to the patient's relatives as well as to the patient and make sure that any information given does not conflict with that given by the doctor.

36. ROSENBERG, H. W. **Professional productivity and quality assurance phases II-V.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, July, vol. 6, no. 7, pp. 286-295.

In 1974 a project was designed to evaluate and improve professional performance and establish controls on quality assurance. The first phase, baseline study (preparatory phase), was completed in 1975. This study reports on the next few phases, which were launched simultaneously: (i) introduction of a problem-oriented medical record system; (ii) physician productivity spectrum; (iii) introduction and use of a nurse practitioner (NP); and (iv) professional productivity and quality assurance. It attempts to demonstrate that: (i) a NP performs her role in emergency medicine with reliability

and thoroughness; (ii) she can work effectively as part of a NP/physician team provided her capabilities are fully used; and (iii) her role is complementary to the physicians. The team effort results in a reciprocal effect as demonstrated by professional performance patterns and a subliminal triage effect should develop between NP and physician. A 'weighted' professional productivity formula is presented that has interesting potential. Time flow data are presented along with demographic data. The problem-oriented medical record format, as adapted for emergency medicine, again demonstrated its potential for effective audit.

37. OLADE, R. A. **Integration of mental health concepts into general nursing education in Nigeria—a survey of nurses' opinions.** *International Journal of Nursing Studies*, Oxford, 1977, vol. 14, no. 2, pp. 63-68.

In the basic general nursing curriculum in Nigeria, eight weeks are allocated for both theory and clinical experience in psychiatric nursing. As there is a shortage of psychiatrists in the country, nurses will play a very important role in mental health care. As there are only about 450 specially trained psychiatric nurses, general nurses will have to be employed to provide mental health care. This paper investigates the opinion of nurses about their preparation for this role. A questionnaire was completed by 73 registered general nurses undergoing post-basic training. The results revealed that mental health concepts and psychiatric nursing are not being well integrated into general nursing education in Nigeria. The specified length of time is not being complied with and there is a lack of adequate clinical facilities, teaching staff and religious/cultural beliefs. Some solutions to these problems are suggested.

OTHER PROFESSIONAL AND TECHNICAL STAFF

38. SHAFFER, M. J. **Clinical engineering: an in-depth review of its economic potential.** *Medical Care*, Philadelphia, 1977, July, vol. 15, no. 7, pp. 552-567.

Clinical engineers are currently employed in hospitals to see that the more complex instrumentation is electrically safe and well maintained. Such an objective fails to capitalize on the economic advantages which can be derived from specialist management. This paper proposes that the objective be broadened to cover the application of engineering technology for lower cost/higher quality health care. The functions involved and the staff needed to attain this objective are analysed, together with the modus operandi for selecting and integrating cost-effective equipment, designing practical maintenance programmes, and training the staff to avoid the abuse of equipment. Details of recent equipment-oriented malpractice suits are reviewed to identify already proven vulnerable areas. The results achieved from this approach at a 450-bed University hospital show an estimated reduction of from $144 to $59 for the average cost of a repair and an overall 60 per cent cost serving in the handling of the biomedical electronic equipment.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 24, 146, 152

39. TALBOTT, J. A. and others. **Administrative receivership and troika management.** *Administration in Mental Health*, Rockville, 1977, vol. 4, no. 2, pp. 17-28.

Two administrative techniques, administrative receivership and troika management, were tried out in a psychiatric unit in a state psychiatric centre in New York City over a four-month period in 1975. The director of the centre, dissatisfied with the unit's functioning, hired a management consultant who, after the resignation of the unit chief, suggested a take-over by a troika consisting of the centre's two deputy directors (one clinical and one administrative) and the chief of education and training. The troika's aims were to: (i) improve treatment; (ii) develop a more decentralized administration; (iii) improve staff morale; and (iv) prepare the way for a new unit chief. The troika took over responsibility for 180 patients in four wards, 30 day hospital patients and 800 out-patients, holding frequent meetings with each other, ward groups, team supervisors and key members of staff. Most of the staff were hostile and regarded the troika as an administrative toy which did not understand their problems. However, there was an improvement in clinical care and most of the staff felt that planning and decision-making were more satisfactory than under a single head. At the end of the four months, 50 per cent of the more senior staff including the director, said they would repeat the experiment, while the troika themselves were against it.

40. WHALEN, P. J. **Unit manager and nurse supervisor: a program for team building.** *Hospital Topics*, Sarasota, 1977, July/Aug., vol. 55, no. 4, pp. 21-25.

This is a description of a seven-month experimental programme undertaken in the Patient Care Department of the Baptist Memorial Hospital, Kansas City, Missouri. The aim of the experiment was to develop the management intervention process in the department. The programme was administered by the Center for Management Development of the University of Missouri and the hospital's own development specialist. A series of interviews were used to establish the attitudes and motivations of the staff of the department, and a questionnaire was administered concurrently to all co-ordinators and managers to determine in numerical quantities varying factors within the departments. The questionnaire consisted of 16 statements and the participants were asked to classify the effectiveness of the institution within the context of the statement. This was followed by a series of lectures on organizational dynamics, practical exercises and open discussion on the topics raised and the value of the intervention process. Finally the questionnaire was given again and participants asked to complete it in view of what they had learnt. The results showed an upward trend in 15 out of the 16 statements, it was thus concluded that the experiment had proved successful.

GOVERNING BODIES, COMMITTEES

See Abstract No. 9

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 38, 59, 97

41. **Taking health care to market.** *Hospitals*, Chicago, 1977, June 1, vol. 51, no. 11, pp. 51-72.

This feature is an attempt to show how marketing techniques can be applied for the

benefit of hospitals. The papers are on: (i) marketing as it is commonly understood in commerce; (ii) how the principles of marketing may be applied in hospitals; (iii) how the Methodist Hospital of Indiana, Indianapolis, stabilized its finances and patient numbers by marketing tertiary services to other providers; (iv) use of marketing skills by American Medicorp, Inc., which owns 37 hospitals and manages 12 others, to turn normal hospital activities into operational and financial advantages; (v) use of marketing and public relations to successfully establish a satellite facility; and (vi) the successful use of marketing techniques by the Children's Hospital of Philadelphia.

42. FERSTER, G. and BUTTS, M. **Variations in revenue expenditure among specialties between districts in an NHS region.** *Hospital and Health Services Review*, London, 1977, Aug., vol. 73, no. 8, pp. 277-280.

Using available data, estimates in this paper are given of per capita annual expenditure for 17 districts within one National Health Service region and available beds and expenditure among specialty classes. Three tables show, respectively: (i) aggregate estimates by district and areas of population, revenue per capita in the self-sufficiency set (medicine, surgery and maternity) and for all specialties combined; (ii) number and proportions of beds and hospital revenue by district and eight specialty classes; and (iii) estimates and proportions of total hospital revenue by district and eight specialty classes. Results identify anticipated regional specialties, but deficiencies among districts to provide a set of 'self-sufficient' specialties are also evident. Reasons for these variations are sought and the discussion includes areas for additional investigation.

43. **Cost containment: Part II.** *Topics in Health Care Financing*, Germantown, 1977, vol. 3, no. 4, pp. 1-110.

The five papers in this issue on cost containment present: (i) a review of selected solutions to the malpractice problem; (ii) functional value analysis as a technique for reducing hospital overhead costs; (iii) the minimization of capital and operating costs through the planning of facilities; (iv) a discussion of whether self-insurance for workers' compensation really saves money; and (v) a review of the factors and forces influencing pension plan costs.

RUNNING COSTS

See Abstract Nos. 57, 58, 99

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 10, 153

44. DAVIDSON, S. M. **Mode of payment and length of stay in the hospital: more work for PSROs?** *Medical Care*, Philadelphia, 1977, June, vol. 15, no. 6, pp. 515-525.

The potential benefit to private third party organizations, Blue Cross and commercial insurance plans of applying Professional Standards Review Organization (PSRO) techniques to their patients is discussed. Data are presented from the Chicago Hospital Discharge Study, conducted in February 1970, before PSRO activities were carried out.

They reveal that the average length of stay for Medicaid patients is not consistently different from that for patients who pay by other means. It is argued that if this scheme proves successful as applied to Medicaid patients, private third parties might also benefit by using the PSRO mechanism to try to monitor and control the stays of their patients.

45. BENEDETTO, R. D. **The 23-hour bed: alternative to hospitalization.** *Health and Social Work*, Albany, N.Y., 1977, May, vol. 2, no. 2, pp. 74-88.

In March 1975 a scheme called 'the 23-hour bed' was devised in Ventura County, California, and from June 1975 to July 1976 handled 1,123 patients, under 25 per cent of whom were admitted to hospital. The scheme is located in the in-patient unit at Ventura General Hospital and the 23-hour patients are encouraged to use the in-patient facilities and participate in group therapy. First, the patient is interviewed informally and any drug therapy is decided upon. Next, the patient's family doctor, psychiatrist if any, and family members are interviewed to find out the circumstances which led to the patient's current crisis. After this stage, the staff have some useful guidelines in deciding whether admission to hospital is necessary. Facts to be considered include: (i) whether the patient committed a criminal act; (ii) whether he has a past history of psychiatric disorders; and (iii) whether he was under the influence of drugs or alcohol. If admission is not considered necessary the unit can call upon a number of support services and a patient who returns home is visited within 24 hours.

APPOINTMENT SYSTEMS, WAITING LISTS

See also Abstract No. 116

46. LEVY, R. and CLARAVALL, V. **Differential effects of a phone reminder on appointment keeping for patients with long and short between-visit intervals.** *Medical Care*, Philadelphia, 1977, May, vol. 15, no. 5, pp. 435-438.

In the paediatrics clinic, Harborview Medical Center, Seattle, Wash., appointment keeping has typically been less than 50 per cent. In a study of telephone reminders, 27 patients (randomly selected) received a call and 25 controls did not. The non-compliance rate for those who received a call was 35.7, about 20 per cent lower than those who did not. Patients whose visits were scheduled more than 14 days prior to the appointment time (long-interval patients) were separated from patients whose appointments were scheduled more recently (short-interval patients). There was a significant difference between the appointment-keeping rates of the experimental and control groups for the long-interval patients, but not for the short-interval patients. Therefore, the use of telephone reminders is particularly recommended for the former.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 55, 63, 82, 120

47. ANDRESEN, B. Edb og fagbevagelsen, 4: tiden er inde til medarbejderindflydelse på edb-området. **[Electronic data processing and the trade union, 4: the time has come for nurses to have a say in the introduction of computerization in the hospital.]** *Sygeplejersken*, København, 1977, June 22, no. 24, pp. 4-7.

It is a declared aim of computerization of hospital routines that it shall free nurses for

the task of providing patients with improved, individual nursing. With certain exceptions, this has not happened: computer techniques have been introduced without prior consultation with the staff categories affected, in contravention of agreed procedures, resulting in increased administrative burdens. The first step was computerized pay slips, with the subsequent computerization of administration of and control over day-to-day work. The nursing union (The Nurses' Council) is in danger of seeing its members' sphere of work eroded and transferred to computers, with consequent unemployment and reduction of wage levels, even though this has admittedly never yet happened in practice. Crossing off diagnoses and observations on cards instead of writing case histories destroys the soul of nursing. It is up to the union to regain nurses' control over the development of computer system design; to train shop stewards in the problems of computerization; to insist on prior permission before staff personal identity numbers may be coded into computers; to insist on observance of the agreement that staff must be consulted in structural and administrative changes; to gain union access to management's data banks; and to force management to re-assess on-going computerization systems.

48. FENNA, D. **A design for integration.** *Computer Programs in Biomedicine*, Amsterdam, 1977, Sept., vol. 7, no. 3, pp. 129-133.

For nearly two decades, the development of computerized information systems has struggled for acceptable compromises between the unattainable 'total system' and the unacceptable separate applications. Integration of related applications is essential if the computer is to be exploited fully, yet relative simplicity is necessary for systems to be implemented in a reasonable time-scale. This paper discusses a system being progressively developed from minimal beginnings but which, from the outset, had a highly flexible and fully integrated system basis. The system is for batch processing, but can accommodate on-line data input; it is similar in its approach to many transaction-processing real-time systems. The system was developed and operated initially on an IBM 360/65 but now runs on a 370/168. The programs are designed and written in Cobol.

49. ZIELSTORFF, R. D. and others. **Experience with a computer based medical record for nurse practitioners in ambulatory care.** *Computers and Biomedical Research*, New York, 1977, Feb., vol. 10, no. 1, pp. 61-74.

The background, requirements and design of a computer-based medical record for nurse practitioners in ambulatory care are described. The major objective was to test the acceptability to primary health care providers of direct entry of narrative information. The system was evaluated after a one-year clinical trial. Although most of the objectives were achieved, changing requirements and lack of acceptability resulted in the withdrawal of the system from the clinical setting. Details are given of the problems with the manual system, project objectives and the operating system.

50. ORMICKI, A. **Real-time BASIC for laboratory use.** *Software Practice and Experience*, Chichester, 1977, July/Aug., vol. 7, no. 4, pp. 435-443.

The syntax and implementation of an interpretive method of handling interrupts within the context of a small foreground-background BASIC system are described. The system can be used on an 8K NOVA mini-computer without background storage and

is designed for data collection and process control in the laboratory. Non-standard input/output devices can be easily serviced in the foreground.

51. McDonagh, B. F., Munson, P. J. and Rodbard, D. **A computerized approach to statistical quality control for radioimmunoassays in the clinical chemistry laboratory.** *Computer Programs in Biomedicine*, Amsterdam, 1977, Sept., vol. 7, no. 3, pp. 179-190.

Methods for statistical quality control for the clinical laboratory in general, and radioimmunoassay in particular, have been proposed for many years; however few laboratories have adopted these procedures. Teletype and other remote terminals connected to a central computer provide, economically, some degree of inter-laboratory standardization and comparison of precision and accuracy. A prototype program for this purpose is described. The program evaluates within-assay and between-assay variability, by means of an analysis of variance for a one-way classification random-effects model, and can monitor any assay parameter by use of control chart techniques. In addition, several tests are provided to evaluate the temporal stability of the assay system, and appropriate tests for outliers are included. Also, methods are described for the combination of information from several quality control samples. For convenience, the program is designed for output on a teletype or similar terminal located in the laboratory. Simplified versions of the program can be readily adapted to desk-top calculators. The original purpose for developing this system was to provide the clinical laboratory with a simple, general and flexible method for assessing the performance of radioimmunoassays, but its usefulness should extend to virtually all assay methods.

52. Reisman, A. and others. **On the design of alternative obstetric anesthesia team configurations.** *Management Science*, Providence, 1977, Feb., vol. 23, no. 6, pp. 545-556.

Ways of alleviating the shortage of anaesthesiologists in obstetric services have been investigated. One approach has involved the construction and validation of a computer simulation model to study the consequences of alternative practice modes with speed, with economy and requiring no human experimentation. Details are given of the validation of the computer simulation model. The data base, methodologies used and results obtained are discussed.

LIBRARIES

53. Library Association. **Regional medical library systems: papers given at the annual conference of the Medical Section of the Library Association, held at the University of Liverpool, 10th-13th September 1976.** London, Library Association, 1977, v, 78pp. £2.00

The papers given at the 1976 Annual Conference of the Medical Section of the Library Association present an overall view of health service librarianship at one point in time. Aspects covered include: Regional medical library schemes in Britain; the Wessex Regional Library and Information System; co-ordination of library services within the Oxford Region, Sheffield Region, Northern Regional Health Authority Area, Merseyside, West Midlands and Scotland; standards; centralized cataloguing services in Wessex; and the use made of postgraduate centre libraries in the four Thames Regions.

MEDICAL RECORDS

See also Abstract Nos. 48, 49

54. HEMELT, M. D. and MACKERT, M. E. **Factual medical records protect hospitals, practitioners, patients.** *Hospitals*, Chicago, 1977, July 1, vol. 51, no. 13, pp. 50-52.

All health care professionals are responsible for maintaining the quality, relevancy, objectivity and accuracy of the medical record. The medical record should provide substantive and substantiated facts that have been observed by skilled staff who analyse the quality and the type of care provided and the reasons for providing it. Like any witness, the medical record can be an adversary or an advocate. If it is properly written and maintained, it will be a hospital's or a practitioner's primary defence and an advocate in any official proceeding.

55. JOHNS, C. J. and others. **A minirecord: an aid to continuity of care.** *Johns Hopkins Medical Journal*, Baltimore, 1977, June, vol. 140, no. 6, pp. 277-284.

A simple, low cost computerized mini-record system has been used for the past two years in the Medical Clinic of the Johns Hopkins Hospital, to permit rapid retrieval of current information concerning Medical Clinic patients. The system provides a computer print-out of the problems and drugs in the front of each chart and an on-line display of this information is available at computer terminals. Chart review revealed that mini-records were present in 92 per cent of the charts and that there was a significant improvement in the recognition of patients' problems and treatment and therapies, noted on the mini-record, on subsequent visits. Modifications to the scheme include the replacement of the separate mini-record and encounter form by a single form which will be of help in updating and completing data. The speed of retrieval of the information provides a means of co-ordinating continuing care in a university hospital system that is otherwise fragmented and composed of multiple health care providers.

HOSPITAL STATISTICS

See Abstract No. 117

PUBLIC RELATIONS

See Abstract No. 41

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See Abstract Nos. 27, 72, 91

FINANCE AND ACCOUNTING

See also Abstract No. 42

56. HÉBERT, D. Réforme de la sécurité sociale: mise en garde à Madame Veil. **[Reform of social security: a warning to Madame Veil.]** *Hospitalisation Nouvelle* Paris, 1977, June, no. 61, pp. 6.26.

In reply to Madame Veil's press conference at which she presented various measures directed towards the reform of the Social Security and hospital systems (see Hospital Abstracts, vol. 17, no. 1220) the spokesmen for the Private Hospital Union point out that in some areas too many new public hospital beds are being approved although permission for new private sector beds has been refused on the grounds that they were superfluous. They believe that the Minister's proposals to amend public hospital charges are inadequate: what is required is a radical reform and the adoption of a contractual system. The Union also attacks the Minister's proposal to abolish the 'ticket', *i.e.* the portion of the cost of hospital treatment borne by the patient himself, which is usually 20 per cent of the total, and to replace it by a daily charge of 15 francs, on the grounds that this is grossly unfair to the private sector where costs are lower and shows favour to the public hospitals which find it difficult to recover these sums from the individual patient and for this reason have a debt of 1,200,000,000 francs. Statistical support for the Union's arguments is contained in five annexes where relevant correspondence and documents are also reproduced.

FINANCE

See also Abstract Nos. 43, 44, 100

57. SINGER, J. P. **Flexible budgeting techniques provide tool for cost control.** *Hospitals*, Chicago, 1977, July 1, vol. 51, no. 13, pp. 45-49.

Inflation and rising public expectations have created an unprecedented need for more elaborate financial planning. Budgeting is an integral component of financial planning. To develop a budget responsive to actual operation conditions, hospitals are beginning to adopt a flexible budget concept. This paper compares the two approaches to budgeting (fixed and flexible) and discusses the implementation and effects of flexible budgeting. In general, flexible budgeting permits more effective performance evaluation than is possible with fixed budgeting systems. The major difference between the two systems can be exemplified by the actual/budget results comparison. Under the fixed budget, the results describe the degree to which the actual compares with expectation. Under a flexible budget, the results describe the degree to which the actual results were appropriate. Thus, the flexible budget does not replace the fixed budget—it adds a new dimension to the analysis of results.

58. YANNACONE, J. A. **A CPA defends hospital costs.** *Trustee*, Chicago, 1977, June, vol. 30, no. 6, pp. 35-38.

In this paper a certified public accountant takes an objective look at the problem of rising health care costs, focusing on hospitals, which account for about 40 per cent of total health care expenditure. Appraisal of the rise in hospital costs involves three questions. What is meant by the term 'price of health care'? Why have hospital costs increased? Have the costly improvements in health care been worth it? The 'price' paid for the majority of patients is only cost and sometimes less than cost. Charges in cost

are reflected in the average cost per day, but charges in the product are ignored. Increases are largely due to four factors: increased salaries and fringe benefits; technological improvements in the quality of care; increased demand for and intensity of services; and higher costs of supplies and services. Statistics which may shed some light on the cost benefits of improved health care are presented. If hospitals are to contain costs successfully, they must: (i) devote substantial time and effort to educating the community; (ii) continue to study alternative forms of care that can be adopted without sacrificing quality of care; and (iii) continue to apply cost containment techniques.

59. WILLIAMS, V. C. **How to recover expenses and charge patients equitably.** *Hospitals*, Chicago, 1977, June 1, vol. 51, no. 11, pp. 91-92, 94.

The pharmacy at the Hospital of the Good Samaritan, Los Angeles, has reviewed its in-patient medication pricing structure with the aim of developing a pricing system that would be equitable to the patients, while properly recovering pharmacy expenses. It was decided that a per dose rate would meet all the criteria. This rate is calculated by the formula $\frac{E}{D(C)}$ where E = projected pharmacy expenses and overhead allocation, C = projected annual patient day census, and D = doses per day as projected from a sample study. The methodology used in arriving at this rate is described. The cost of implementing the system was minimal and its operation required no increase in cost. The system has proved to be satisfactory.

60. ROSENBERG, N. **An incentive plan for national health insurance: bringing the consumer into the picture.** *Journal of the American Medical Association*, Chicago, 1977, June 13, vol. 237, no. 24, pp. 2623-2627.

There have been many health insurance plans proposed for adoption on a national basis in the United States. Any insurance plan must offer the patient suitable incentives in order to limit the demands on the services available. The author suggests a health currency for health care to be distributed periodically, either to an individual or a group, in the form of scrip. Those receiving state benefits could receive some as health currency and the medically indigent could buy scrip at reduced rates. Scrip should be valid for a 12-month period and be transferable within a family. Any unused scrip could be redeemed for cash or tax credit. Extra health scrip could be earned by those prepared to take part in studies to help preventive medicine. Patients would be free to continue with their existing health insurance scheme if they so desired.

61. La conception C.G.C. de l'assurance maladie. **[The Confédération Générale des Cadres' thoughts on health insurance.]** *Hospitalisation Nouvelle*, Paris, 1977, June, no. 61, pp. 31-38.

The Confederation first refutes the charge that its members (the managerial classes) abuse the health service. It then offers advice on how costs in the service can be prevented from rising even further. Higher taxes on alcohol, stronger measures on drug addiction, a reduction in the consumption of medicines, the establishment of 'prescription profiles' for the individual doctor and of 'medical consumption profiles' for patients, families, and regions are suggested; the psychological value of the latter is stressed. Turning to the question of hospital costs, the Confederation insists that the private sector must be allowed to develop within the context of the 'Hospital Map'. Doctors

should be more rigorous in their selection of patients for admission to hospital; a specific programme of diagnostic investigations based on the clinical data should be established for each patient; there should be closer involvement of and training for doctors in hospital management and streamlining of the top-heavy administrative and financial structure of the public hospital. The large number of admissions to hospital for purely social reasons could be reduced by improving living standards generally.

SUPPLIES AND STORES

SUPPLIES

62. SCHABRACQ, A. and WHITE, A. F. **Taking the mystique out of M.M.: what it is . . . how it works . . .** *Hospital Administration in Canada*, Don Mills, 1977, Aug., vol. 19, no. 8, pp. 19, 22-23, 26.

The first of these two papers presents a definition of materials management, which the author sees as covering general stores, purchasing, central supply, linen, printing, transport and mail room. The advantages of materials management are outlined. The second paper describes how materials management works at Etobicoke General Hospital, which uses an automated trolley transport system. The description covers: staffing; inventory; purchasing; printing shop; mail distribution; supply, processing and distribution; and processed stores.

63. LEVENTHAL, E. **Computers in the future of materiel management.** *Hospital Administration in Canada*, Don Mills, 1977, Aug., vol. 19, no. 8, pp. 26-27, 30.

Some of the concepts of materials management as developed and used by Friesen International are summarized under the headings: centralization, decentralization, separation of clean and soiled items, bulk and processed stores, trolley supply system, and trolley transport. Taken together these are believed to be a basis for the orderly, efficient and clean handling of the material needs in a hospital. It is not necessary to have a new facility to implement them, nor is it necessary to accept them on an 'all-or-nothing' basis. Plans and very brief descriptions of supply, processing and distribution departments at the 32-bed Biggar Union Hospital and 450-bed Ottawa General Hospital are included to illustrate the concepts.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

64. L'alimentation à l'hôpital. **[Hospital catering.]** *Hôpital à Paris*, Paris, 1977, May/June, no. 39, pp. 199-265 (whole issue).

In a series of 14 short articles the authors review advances made in the fields of dietetics and nutrition in public hospitals in Paris over the last six years and they also

discuss inadequacies such as out-of-date equipment and poor facilities. The systems used for the distribution of meals and the organization of dietetics in five hospitals are described and the advantages of the 'hot chain' individual tray system are stressed. A study in two hospitals suggested that doctors are ill-informed as to the range of dietetic diets available. A technique for the systematic detection of dyslipoproteinaemia and disturbances of glycoregulation in cardiology, rheumatology, and internal medicine units is described, and there are two articles on the use of computers in the prescription of diets and in the ordering of *à la carte* meals for patients.

65. WOOD, S. D. **A model for statistical forecasting of menu item demand.** *Journal of the American Dietetic Association*, Chicago, 1977, March, vol. 70, no. 3, pp. 254-259.

Hospital catering management is responsible for providing each patient with the nutritional requirements dictated by his or her ailment. Inherent in this obligation are the tasks of ordering, purchasing, storing, preparing, assembling and serving the varied diets required. This paper develops an economical and timely procedure for obtaining and updating accurate forecasts of the demand for menu items. The approach, as adopted at Madison (Wisc.) General Hospital consists of: (i) modelling total tray count demand for each meal with a rather sophisticated integrated auto-regressive moving average time series model; and (ii) developing a table for each meal in the menu cycle composed of percentages of total tray count for each item to be forecast. The approach requires statistical and computer expertise primarily during the development of the tray count model and patient preference percentage model. The results can be transferred to a form that is easily used by catering management staff manually to generate menu item demand forecasts.

DIETETICS IN THE HOSPITAL

See Abstract No. 64

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

66. WEISS, G. S. **The case for central laundries.** *Hospital Administration in Canada*, Don Mills, 1977, July, vol. 19, no. 7, pp. 15, 18, 19.

Southern Alberta Regional Laundry Services, Lethbridge, Alberta, serves 20 health care facilities and 13 general hospitals. It replaced 20 scattered laundries, each with its own equipment and staff. In 1975, the first full year of operation, centralization saved participating facilities $250,000 in hidden and direct costs, an average of 10 cents per pound. Details are given of costs, equipment and procedures. Brief details are given of other central laundries and of the lessons learnt from them.

67. BOWER, D. **Maximum production maintained as this hospital laundry does a full 180° turn.** *Power Laundry & Cleaning News*, London, 1977, Aug. 5/19, pp. 18-19, 21.

To meet the requirements of the new teaching hospital being built at Nottingham and

other developments in the area, it was decided to extend the Sherwood Laundry, already serving 22 hospitals and processing 190,000 articles a week, rather than build a new laundry. Because of site and other restrictions, the only solution was to build a new extension on the only land available and incorporate new reception and washing departments, offices and a finishing area extension. The siting of the new wash and reception areas at the opposite end of the existing building required that the finishing plant and work flow had to be turned round through 180° without disruption of production. This paper describes how the work was planned and carried out and the new equipment installed.

HOSPITAL DOMESTIC MANAGEMENT

68. WILSON, H. **Cleanliness is next to . . .** *HCIMA Journal*, London, 1977, Aug., no. 68, pp. 13, 15.

This paper discusses the domestic services department and its work, and makes comparisons with housekeeping in an hotel, so as to bring the two services into perspective. The aim of the department is to provide a clean and hygienic atmosphere within the hospital, with minimal disturbance to patients. In order to fulfil this aim the department must have sufficient trained staff, adequate equipment and efficient materials. The domestic services manager has a greater responsibility towards the patient than a hotel has towards the guest. There is also considerable satisfaction to be derived from working in the hospital environment. Cleaning methods in a hospital tend to be different from those in an hotel; there is for instance considerable use of disposables. Ward cleaning must fit into the ward routine. Domestic staff are also normally involved in the service of meals and drinks to patients, and in some hospitals in washing up. Domestic staff are increasingly undertaking duties in the ward to relieve nursing staff of 'non-nursing' duties.

DOMESTIC WORK

See also Abstract No. 76

69. LILLY, N. **Housekeeping without guesswork.** *Hospital Administration in Canada*, Don Mills, 1977, July, vol. 19, no. 7, pp. 15, 19, 20.

The value of the role of housekeeping in the prevention of infection is outlined. The many changes taking place in housekeeping arise from research, automation, disposables, and new management skills and techniques. Other factors include the role of the infection control officer, accreditation, and government financial restraints. Bacteriological housekeeping is not the only factor in a programme to prevent acquired infections, but it is one of the most essential aspects of the total programme. Bacteriological or scientific housekeeping can be accomplished only if the guesswork is taken out of housekeeping procedures. It is absolutely essential to apply bacteriological tests to prove or disprove the effectiveness of the cleaning process. A number of recommendations on procedures are made.

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

70. McGowan, J. E., Parrott, P. L. and Duty, V. P. **Nosocomial bacteremia: potential for prevention of procedure-related cases.** *Journal of the American Medical Association*, Chicago, 1977, June 20, vol. 237, no. 25, pp. 2727-2729.

During a six-month period at Grady Memorial Hospital, Atlanta, Georgia, 187 patients had bacteremia associated with community-acquired infection and 91 patients had bacteremia from a nosocomial infection. The most frequently identified sites of infection in both types of bacteremia were the respiratory and urinary tracts. *Escherichia coli* and *Diplococcus pneumoniae* were the organisms most frequently isolated from cultures of patients with community-acquired bacteremia and *E. coli*, *Staphylococcus aureus* and *Klebsiella* were most frequently isolated from patients with nosocomial bacteremia. Bacteremic nosocomial infections were related to urinary catheters, respiratory and intravenous therapy or hyperalimentation in 32 of the 91 cases. The need for further research into prevention of nosocomial infections is discussed.

71. Johnstone, I. E. *Pseudomonas aeruginosa* **and wound infections.** *Nursing Times*, London, 1977, Aug. 25, vol. 73, no. 34, ICNA supplement, p. 55.

Between April and October 1976, 14 patients in an Ayrshire hospital had wound infections due to *Pseudomonas aeruginosa*. *Ps. aeruginosa* was cultured from the instrument sink overflow and floor drain in the operating theatre and from Redivac drainage tubing and bottles. Control measures included: (i) use of disposable Redivac drainage tubing and autoclaving of the bottles; (ii) hermetical sealing of the floor drain as it had no use; (iii) replacement of soap dishes by magnetic soap holders to ensure that the soap was dry between use; (iv) treatment of drains and overflow with a strong solution of hypochlorite after normal cleaning; (v) re-arrangement of instrument cleaning facilities and provision of an automatic instrument washer; and (vi) correct repair of the floor scrubbing machine to allow the tank to be detached and properly drained after each use. Easily implemented changes have been carried out. The absence of further wound infections for the past six months may owe more to increased staff awareness of the problem than to the changes.

SOURCES OF INFECTION

See Abstract Nos. 70, 73

PREVENTION AND CONTROL

See also Abstract Nos. 28, 69-71, 75, 77

72. Bell, J. D. **The Health and Safety at Work Act 1974 and its application to infection control.** *Nursing Times*, London, 1977, Aug. 25, vol. 73, no. 34, ICNA supplement, pp. 50-52.

The relevance of the various Factories Acts to infection control prior to 1 April

1975 are outlined. The main provisions of the Health and Safety at Work Act 1974 are briefly discussed. Their relevance to infection control is assessed, with particular reference to selection of staff, training and information, environmental monitoring, and policies and codes.

73. OJAJÄRVI, J., MÄKELÄ, P. and RANTASALO, I. **Failure of hand disinfection with frequent hand washing: a need for prolonged field studies.** *Journal of Hygiene*, London, 1977, Aug., vol. 79, no. 1, pp. 107-119.

Several studies have evaluated the effectiveness of disinfectants in hand washing in surgery, but few in wards. The latter studies have either been performed in laboratory conditions or as in-use tests of short duration with selected test persons. This paper reports a study to measure the microbial effectiveness and effects on the condition of the skin of a hand disinfectant that in earlier studies had been found microbiologically effective. A four per cent chlorhexidine digluconate detergent scrub was used first in the Radiotherapy Clinic, University of Helsinki (where the hand washing frequency was fairly low) and then in the neonatal unit of the Children's Hospital, University of Helsinki (where the hand washing frequency was remarkably high). In the first case, the bacteriological results resembled those obtained by in-use tests with volunteers. In the neonatal unit, an increase in the bacterial colony counts of the majority of the staff was recorded both before and after hand washing after using the preparation for one week. Twenty-seven out of 37 persons complained of side effects. After a change of washing practice to a detergent followed by a rinse with spirit solution containing chlorhexidine and glycerol a decrease was recorded in bacterial counts. More attention should be paid to the long-term testing of hand washing and disinfection methods to ensure optimum final results in practice.

HYGIENE IN THE OPERATING THEATRE

74. ARNOLD, R. **The new realities: dated rituals don't check infection.** *Hospital Administration in Canada*, Don Mills, 1977, July, vol. 19, no. 7, pp. 15-17.

Elaborate 'septic case' procedures in some operating theatres are time-consuming and expensive, all for little microbiological advantage. A single decontamination procedure—practical, swift and safe—plus an alert circulating nurse is the most effective combination for all operating theatre cases. Decontamination techniques should be microbiologically sound, and render the environment safe for all surgical patients and the people caring for them. Recommendations are presented for use in all operating theatre situations. If good aseptic techniques are practised, together with safe housekeeping hygiene standards, there is no need for elaborate time-consuming clean-up rituals.

75. HAMBRAEUS, A., BENGTSSON, S. and LAURELL, G. **Bacterial contamination in a modern operating suite. 1. Effect of ventilation on airborne bacteria and transfer of airborne particles.** *Journal of Hygiene*, London, 1977, Aug., vol. 79, no. 1, pp. 121-132.

The effect of ventilation of airborne contamination was studied in the new operating suite, University Hospital, Uppsala. The suite contains theatres with conventional

ventilation (17 to 20 air changes per hour) and zonal ventilation (about 80 air changes per hour in the central part of the theatre). Gas tracer experiments showed that there was little risk of spread of infection between theatres. Experiments with potassium iodide particles showed that in theatres with zonal ventilation the particle concentration was about one-tenth that in the periphery. In conventionally ventilated theatres the concentration was about one-half. With bacteria-carrying particles generated by human activity the concentration in the centre of theatres with zonal ventilation was about half that in the periphery both during experimental activity and operations; with conventional ventilation it was about equal in both cases. Bacterial counts at the periphery were found to be lower in rooms with zonal ventilation than in those with conventional ventilation.

76. HOWELLS, M. **Investigation of cleaning apparatus in theatre.** *Nursing Times*, London, 1977, Aug. 25, vol. 73, no. 34, ICNA supplement, p. 56.

Following seepage of water through the floor of an operating theatre (due to a J-cloth blocking a drainpipe) and contamination of the floor, an investigation of the cleaning procedures was carried out. The process involved throwing buckets of water containing detergent over the floor, which was then scrubbed with a mechanical scrubber (with a removable brush). The floors were rinsed with clear water by the same method, then a suction machine removed excess water. The brushes were heavily contaminated. It was concluded that the use of brushes should be discouraged, but the use of nylon pads might prove to be more satisfactory as they wash fairly easily and dry quickly. The use of a two per cent solution of Stericol, as a routine for washing the theatre floors, was also suggested. In tests with the new procedures, one swab from the wet bucket in the machine grew scanty *Escherichia coli* and *Staphylococcus albus;* all dry parts grew nothing.

77. MEDDICK, H. M. **Bacterial contamination control mats: a comparative study.** *Journal of Hygiene*, London, 1977, Aug., vol. 79, no. 1, pp. 133-139.

Contamination control mats have been used for many years as an aid in preventing the transfer of bacteria-carrying particles in dust on equipment and on the soles of footwear from dirty to clean areas such as operating theatres. This paper reports a study in which six different types of mats (details of which are given) were tested at the entrance to an operating theatre. The method used is described and the results are presented in three tables and discussed. Marked differences in the effectiveness of the mats were demonstrated. Three were unsatisfactory; two were satisfactory but lost their effectiveness after a short time. The sixth was satisfactory in both respects, but the mat tended to ruck up, if the floor was not absolutely clean and dry, and, if wet, to slip; in addition the top surface was dangerously slippery when wet. Modifications to overcome these problems are suggested. This mat was also the most economic.

STERILIZATION

78. BERGAN, T. **Disinfection of inanimate material in medicine.** *Archiv for Pharmaci og Chemi*, København, 1977, Aug. 6, vol. 84, no. 16, pp. 777-786.

This review of disinfection of inanimate matter covers: when disinfection is needed; heat disinfection; choice of heat-enduring materials; chemical disinfectants, their

properties and choice; results of examining chemical disinfectants; general rules of disinfection; and choice of chemical disinfectants. Moist heat is preferred and materials which endure heat treatment should be chosen. When chemical disinfectants are still required, the choice of disinfectant depends somewhat upon the objects and the infectious agents to be inactivated. Generally, phenolics are preferred. Chlorine compounds or iodophors are alternatives when antiviral activity is desired. For clean situations and endoscopes, chlorhexidine (aqueous or alcoholic) may be used. For endoscopes, glutaraldehyde, formaldehyde autoclaving, or moist heat at atmospheric or subatmospheric pressures are the most efficient alternatives.

79. COBIS, J. **Should hospitals continue to use ethylene oxide for sterilization?** *Hospitals*, Chicago, 1977, July 1, vol. 51, no. 13, pp. 73-74.

The United States Veterans Administration (VA) has accumulated data on the use of ethylene oxide (ETO) sterilization in its 171 hospitals and eight out-patient clinics. Although all the available data has not yet been collected and analysed, some information in defence of the continued use of ETO can be presented. The average length of use in all VA hospitals is 8.2 years. Only three small facilities do not use ETO. The remainder run 79,000 ETO sterilization cycles annually to sterilize five million individually processed and wrapped items. Since the hospitals began using ETO, only one 'possible patient injury' was reported due to residual effects of ETO. Twelve incidents of 'possible staff injury or illness' due to ETO were reported. All of these incidents were minor, such as irritation of the eyes and nausea. The 10 adverse effects of discontinuing the use of ETO mentioned most often by VA physicians are listed. Based on the VA's record it appears that use of ETO should be continued.

SAFETY MEASURES

ACCIDENTS, GENERALLY

See also Abstract No. 79

80. PABLO, R. Y. **Patient accidents in a long-term-care facility.** *Canadian Journal of Public Health*, Ottawa, 1977, May/June, vol. 68, no. 3, pp. 237-247.

A systematic, three-year analysis of accidents at the 186-bed Parkwood (long-stay) Hospital, London, Ont., is reported. Contrary to common expectation, annual accident rates ranging from 18 to 24 per 10,000 days of patient exposure were comparable, if not lower, than those reported for general hospitals. The results are presented in five tables and seven diagrams. Examination of the variations in the frequency of accidents by age, sex, condition of the patient, time, day, date, site of the accident, activity engaged in, unsafe conditions, presence and nature of injury and a variety of other information provided some insights on the patient and environmental determinants of accidents. The evaluation of the relationships between these determinants sheds some light on the epidemiological patterns of patient accidents.

ACCIDENTS IN GAS AND DRUG ADMINISTRATION

See Abstract No. 144

FIRES AND FIRE PREVENTION

81. FLETCHER, J. R. **Fire preventions and precautions.** *Hospital Engineering*, London, 1977, Aug., vol. 31, no. 6, pp. 23-26.

This paper outlines the items to be included in a fire survey of a hospital, lists things to do and not to do in fire precautions, presents definitions of important fire prevention terms, and stresses some basic rules.

82. WHITE, D. and YOUNG, N. **Computer lights up gaps in organising the training.** *Health and Social Service Journal*, London, 1977, Aug. 12, vol. 87, no. 4553, pp. 1160-1161.

The need for adequate fire precautions training for hospital staff is stressed. The problems of selecting staff for training and ensuring regular instruction are outlined. A computerized system for selecting staff for training and recording attendance is now on trial in Fife. Computer Assisted Staff Training and Recording (CASTAR) uses a specially designed printout document modelled on the payroll system. At a basic level the system: (i) provides a complete, accurate and accessible list of all staff who constitute the 'target population' for training: (ii) provides a complete, accurate and current record of the training given to each employee; and (iii) permits ready identification of staff in greatest need of each type of training.

PLANNING FOR MASS EMERGENCIES

83. SKEET, M. **Manual for disaster relief work.** Edinburgh & London, Churchill Livingstone, 1977, xii, 412 pp. £12.00

This book considers both natural and man-made disasters throughout the world. Increasing public awareness of disaster situations together with a need for better management procedures has resulted in a need for more effective use of available resources. The complexities of disaster situations are discussed, together with the principal causes, effects and frequencies of such events. The many aspects of relief work required to meet with these situations are discussed. A series of appendices are included together with a glossary, bibliography and index.

84. SIM, J. **Medical planning for major emergencies.** *Hospital International*, London, 1977, Aug., vol. 11, no. 4, pp. 10-12.

The overall planning for major emergencies in the United Kingdom is the responsibility of the county councils. This paper considers the pre-planning for major emergencies as it effects hospital services. This cannot be done in isolation because such major incidents have to be a team effort. The roles and functions of the police, ambulance and first-aid services are outlined. Any scheme for hospital procedure must be simple, flexible and easily modified to suit altering situations and so designed that: (i) all non-essential routine work stops; (ii) all staff on and off duty report for special duty; (iii) as far as possible staff are detailed for duties within their usual workplace; (iv) additional staff report to a communal point which needs to be well away from working areas but with good telephone or radio communication; and (v) whoever is

appointed as hospital co-ordinator must be given full authority to act as the situation demands. A specimen plan of operation is reproduced. The need for good communications is stressed.

85. ONJI, Y. **EMS communication system in Osaka, Japan.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, July, vol. 6, no. 7, pp. 312-314.

Osaka prefecture, with a population of 7.4 million, is divided into 40 municipalities, each with an independent ambulance dispatching centre. An emergency medical services information centre (EMS-IC), equipped with a radio network and memory devices, collects information on available specialists and vacant hospital beds every three hours from 300 hospitals in the whole prefecture. This information is supplied to physicians, ambulances, medical institutions, fire services, police, ambulance dispatching centres and the Red Cross. EMS-IC can provide the name of the most appropriate hospital to a moving ambulance on request from rescue staff. It also stores information on banked blood and antiserum.

THE PATIENT

ADMISSION AND RECEPTION

See Abstract No. 107

WELFARE OF THE PATIENT

See also Abstract Nos. 7, 14, 32, 34, 125-127, 129, 138, 147

86. CONFEDERATION OF HEALTH SERVICE EMPLOYEES. **The management of violent or potentially violent patients: report of a special working party offering information, advice and guidance to COHSE members.** Banstead, Confederation of Health Service Employees, 1977, [vi], 43 pp. £0.75

This is the final report of a special working party offering guidelines for the training of staff in the handling of violent or potentially violent patients, particularly as far as the psychiatric emergency is concerned. There are three sections: (i) the problems including psychiatric hospitals, the psychiatric nurse, the community psychiatric nurse, casualty departments and general hospital wards, ancillary staffs, and the psychiatric emergency; (ii) summary of recommendations in all areas of the health service; and (iii) advice to members of the Confederation of Health Service Employees, which includes such aspects as: the prevention of violence, damage and legal advice. Three appendices are also included: statement of the position of the Metropolitan Police; the 1959 Mental Health Act; and Contempt of Court.

87. HOBBS, P., EARDLEY, A. and THORNTON, M. **Health education with patients in hospital.** *Health Education Journal*, London, 1977, vol. 36, no. 2, pp. 35-41.

Patients should be fully informed about the operation to be carried out on them,

particularly as to what the post-operative effects and adjustments will be. All members of a ward team should be educated to give information within their range of competence. If patients are well informed, they will find it easier to ask questions and suffer less anxiety. The order in which information is presented is important; categorizing information can produce a 50 per cent increase in retention of facts. Research teams and hospital staff should collaborate in: (i) identifying and solving problems; (ii) disseminating information to the staff involved; and (iii) communicating the information to the patients. Many problems, such as stoma care and management of prostheses, need to be dealt with by individual teaching. This education programme can often be helped by use of audio-visual aids, such as slides with a sound commentary. A recognized teaching programme for each problem or illness, if made familiar to both hospital and community teams, can help to bridge the gap between hospital and community care.

88. LEE, E. A. and GARVEY, J. L. **How is inpatient education being managed?** *Hospitals*, Chicago, 1977, June 1, vol. 51, no. 11, pp. 75-76, 78, 80, 82.

In July 1975, survey questionnaires were sent to approximately 6,000 community, non-federal, short-stay general hospitals. Of these, 2,680 indicated that one or more of their patients' education programmes complied with the survey definition of in-patient education—educational activities with written goals and objectives for the patient and/or family during in-patient care. This analysis of the results of the survey covers: setting policy; co-ordination; implementation; documentation; evaluation; and financing. Hospitals differ in where they place the responsibility for patient education and in how they undertake the patient education task. Flexibility is required and management must be aware of what is involved. Eight suggestions are made for helping to develop that awareness: (i) time must be set aside for needs assessment and initial planning; (ii) the responsibility for co-ordinating patient education activities should be assigned; (iii) staff must not come to view the co-ordinator as the patient educator; (iv) the support and involvement of nursing management is essential; (v) the support and involvement of the education staff is likewise important; (vi) staff patient education performance must be evaluated and rewarded; (vii) care should be taken about generating 'new pieces of paper' to implement each programme; and (viii) patient education programmes should be part of the process of defining patient care outcomes.

89. SHERIZEN, S. and PAUL, L. **Dying in a hospital Intensive Care Unit: the social significance for the family of the patient.** *Omega*, Farmingdale, N.Y., 1977, vol. 8, no. 1, pp. 29-40.

The article reports on a four-month study of the reactions of relatives of critically ill patients between the time of the patient's admission to an intensive care unit and their death. The families of six such patients, 22 persons in all, formed the sample for the study and data was gathered from a number of interviews with different relatives. The physical appearance of the unit made the majority of family members feel uneasy, while recognizing that it was necessary for the care of the patient. Rules about visiting the unit were strictly adhered to by the families, a fact which helped build good relationships with the medical staff. Changes in the patient's condition brought changes in the family's relationship to the patient. Contrary to expectations, the family members were calm when the patient was at a low point, but were uneasy

when he seemed better. Some tried to explain this by reference to the strains placed upon them by the unit's environment. Family involvement with the patient was also limited by the necessity of the staff to take from the family the role of trust, and from the patient the control of his basic daily needs. These restrictions on the families made it more difficult for them to face the patient's death and tended to draw out the period of grief.

HOSPITAL SOCIAL WORK

90. McKechnie, C. B. **The role of a chaplain in crisis.** *Hospital Administration in Canada*, Don Mills, 1977, July, vol. 19, no. 7, pp. 32-33.

The role of the chaplain in a time of crisis was studied at Toronto General Hospital. Three units were each studied for three months: respiratory intensive care unit, coronary intensive care unit and cardiac arrest team. Questionnaires were used in assessing the role and function of the chaplain, as seen by patients and relatives, medical and nursing staff, and the chaplains themselves. The roles of the chaplain were classified in five groups: helping with practical details; giving comfort; giving spiritual assistance; facilitating communications with medical staff; and others. Conclusions drawn are: (i) there is a genuine attempt to build a relationship between chaplain and patient and a strongly positive response from patients or relatives; (ii) the chaplain's main role is seen by all three groups as giving comfort; (iii) chaplains and medical and nursing staff saw the chaplain as most effective in the role of communicator, while relatives rated this role slightly below that of helping with practical details; (iv) staff did not know when chaplains were making calls; and (v) comments show the importance of the chaplain's role. Recommendations made are: (i) communication between medical and nursing staff and the chaplain needs improvement; (ii) formal lectures on the role of the chaplain should be given to medical and nursing staff; and (iii) medical and nursing staff should be aware of the need of patients and relatives for the chaplain and use him as a significant factor in the healing process and total well-being of patient and relatives.

TRANSPORT OF PATIENTS

See also Abstract Nos. 121, 139

91. Pollard, M. **Steering clear of hazards in the drive for safety first.** *Health and Social Service Journal*, London, 1977, Aug. 26, vol. 87, no. 4555, pp. 1214-1215.

Codes of practice and safety guidelines are available for most workers employed in hazardous jobs, but there is little guidance for ambulance staff who daily may be called on to provide aid in high risk areas. Hazards they face include: providing roadside care, infected patients, involvement in major incidents in high risk areas, and care of certain equipment including medical gas storage. Lack of national guidance makes local policies and codes imperative. Dissemination of intelligible information is essential. The duties of safety representatives, health and safety committees and safety officers are discussed.

HOSPITAL CARE

See also Abstract Nos. 29-34, 40, 44, 108, 114, 118, 127, 128, 133, 134

92. EFIONAYI, K. M. **Worklist: a useful directive for nursing care.** *Journal of Advanced Nursing*, Oxford, 1977, July, vol. 2, no. 4, pp. 373-382.

At University College Hospital, Ibadan, Nigeria, a worklist (reproduced) was formulated to serve as a directive spelling out in piecemeal fashion the tasks and general procedures in the nursing services in such a simplified manner as to make it operative, even by the least knowledgeable student nurse. A study was carried out to identify the merits and elements of the worklist as perceived by the nurses themselves. A structured and pre-tested questionnaire was completed by 288 nurses. Conclusions drawn from analysis of the replies include: (i) the worklist should be given more attention; (ii) separate formats should be made for each unit based on the routine care pattern of each ward; (iii) the various operations on the worklist should be timed in order to ensure effective administration of services to the patients with relationship to time of the day; (iv) in order to ensure even division of labour, assignments should be on a rotation basis from day to day; (v) staff nurses should show leadership in the use of the list; (vi) senior nurses should discuss assignments with their juniors in order to facilitate evaluation and follow-up; (vii) use of the worklist should be emphasized in schools of nursing; (viii) in areas where teamwork is a necessity, the worklist should reflect this need; and (ix) demonstrations should be organized on the wards in order to clarify the use of the worklist.

93. WEIGHTMAN, G. **Death and the doctors.** *New Society*, London, 1977, Aug. 4, vol. 41, no. 774, pp. 222-224.

The number of deaths in hospital has increased considerably over the last ten years. There are two key issues in the care of the dying: (i) whether the patient should be told; and (ii) the use of drugs to control pain in terminal patients. A number of surveys have shown that 80 to 90 per cent of doctors rarely tell patients if they think an illness is terminal, while 80 per cent of patients say they would like to be told. On the other hand, dying patients generally realize that they will not recover. Doctors may be shy about talking about death since medical training emphasizes cure rather than care. As to the control of pain, many doctors are unwilling to give terminal patients adequate pain-killing drugs. However, there is evidence that medical students are now showing more interest in the care of the dying and there are now courses in 68 per cent of the medical schools. The current movement for voluntary euthanasia is sad evidence of the breakdown of understanding which can surround death, particularly in hospital.

94. PLANT, J. **Finding a home for hospice care in the United States.** *Hospitals*, Chicago, 1977, July 1, vol. 51, no. 13, pp. 53, 55, 57-58, 61-62.

The philosophy of and care provided by hospices of the terminally ill are discussed. By English tradition, hospices are autonomous units, but in the United States hospice care provided by a hospital-based hospice team is gaining favour. This treats the terminally ill wherever they are in the hospital, or in a special unit functioning as a hospital department, or a free-standing unit affiliated to the parent hospital. Hospice care provided by the following facilities is described: Hospice Inc., New Haven,

Conn. (autonomous unit); St. Luke's Hospital Center, New York (hospice team); Parkwood Community Hospital, Canoga Park, Calif. (hospital department); and Riverside Hospice, Boonton, N.J. (hospital-affiliated). The relative merits of autonomous hospices and hospital hospice units are discussed, together with some of the problems involved in hospice care.

95. JACOBS, C. M., CHRISTOFELL, T. H. and DIXON, N. **Measuring the quality of patient care: the rationale for outcome audit.** Cambridge, Mass., Ballinger Publishing Co., 1976, xv, 185pp. £10.00

This book provides a general discussion of the need and demand for systematic patient care, evaluation, methodologies, the theories underlying different approaches to quality evaluation, and an in-depth description of one particular hospital-based methodology: the Performance Evaluation Procedure for Auditing and Improving Patient Care (PEP). In two years PEP became the most extensively used patient care evaluation procedure in United States, yet a general description has not previously been available. A series of appendices and a select bibliography is included.

96. **Quality assurance and peer review.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 3, pp. 1-137.

The nine papers in this feature deal with: (i) setting and maintaining standards to achieve customer satisfaction; (ii) a detailed case study of experience with quality assurance at Duke University Hospital, Durham, N.C.; (iii) the significance of administrative control in quality assurance; (iv) development of peer review criteria by intensive care nurses in Wisconsin; (v) a system approach to evaluation of nursing performance; (vi) a quality assurance forum; (vii) a nursing process audit developed at Mercy Hospital and Medical Center, Chicago; (viii) audit of care processes and patient outcome as one facet of quality assurance; and (ix) assessing the status of a nursing audit process.

97. COLEMAN, J. R. and KAMINSKY, F. C. **A financial planning model for evaluating the economic viability of Health Maintenance Organizations.** *Inquiry*, Chicago, 1977, June, vol. 14, no. 2, pp. 176-188.

Existing financial planning models for health maintenance organizations (HMOs) have two shortcomings: (i) they are conceptual and presented as incentives for future development; or (ii) they have been developed for a specific situation and are not easily adapted to other settings. The model developed in this paper extends this work. Input to the model consists of several design decisions related to the programmes and services to be offered, the method of delivering these services, prices to be charged for services, the cost of health resources, etc. Output consists of 15 reports which are used to evaluate the proposed design. The general structure of the model, sensitivity analyses, use of the model in a typical planning situation, the versatility of the model, and its cost-benefits are described.

DISCHARGE OF PATIENTS

See also Abstract No. 153

98. SCHOFFERMAN, J. and others. **Use of the telephone for short-term follow-up.** *Medical Care*, Philadelphia, 1977, May, vol. 15, no. 5, pp. 430-434.

A telephone appointment system for the follow-up of emergency department patients with well-defined relatively minor problems is described. The patient is asked to call a special telephone number at a specified date and time to obtain test results or information. A senior physician reviews each chart beforehand and indicates, in lay terms, the information to be given to the patient by the clerk. In 404 scheduled telephone appointments during a four-week period, initial contact was made with 235 patients (58 per cent). Physician data review time averaged one minute per chart and two full-time clerks were required. Although no improvement in patient compliance was found, significant savings of patient/physician and nursing time are obvious. Additional advantages include lower total patient load and the opportunity for senior physicians to assess the quality of care and provide feedback to the emergency department house officers.

HOME CARE, AFTER-CARE

See also Abstract Nos. 98, 136, 143

99. SEIDL, F. W., AUSTIN, C. D. and GREENE, D. R. **Is home health care less expensive?** *Health and Social Work*, Albany, N.Y., 1977, May, vol. 2, no. 2, pp. 5-19.

The article provides a framework for comparing the costs of home care with those of hospital care. There is not enough data available to settle finally the question of which is cheaper, but five factors need to be considered: (i) the population served; (ii) the identification of home care patients; (iii) how different cases are managed; (iv) the quality of the service provided; and (v) who bears the cost. It does not necessarily follow that patients receiving home care would be in a nursing home if the home care service was not available. Also, an institution can provide a range of services centrally. Decisions as to who should receive home care and whether these decisions are made by medical or social service staff will affect costs. In addition, if a home care service exists, people themselves will make demands on it. Cases managed from an agency providing services will be more expensive than those organized from a non-providing, centralized point. Where home care services are in short supply, expense will be incurred in building up good quality professional care. An increase in the number receiving home care would reduce Medicaid expenditures but would increase the demand for supplementary security benefits and possibly involve the patient's family in some expense.

100. CREESE, A. L. and FIELDEN, R. **Hospital or home care for the severely disabled: a cost comparison.** *British Journal of Preventive and Social Medicine*, London, 1977, June, vol. 31, no. 2, pp. 116-121.

A case study of severely disabled patients needing regular mechanical help with breathing following poliomyelitis was set up by St. Thomas' Medical School, London, in 1970, to establish what medical, technical and social support would be required for home rather than hospital care. The two care alternatives are considered from an economic point of view and a detailed cost comparison is made between entirely

hospital based care and predominantly home care. The data suggests that home care may be a more economic proposition than constant hospital care. The practical obstacle to the maintenance of such a policy is the difficulty in obtaining suitable attendants.

SPECIAL DEPARTMENTS

WARDS

See Abstract No. 131

ANAESTHESIA

See also Abstract No. 144

101. HEGGARTY, J. M. and KIRCHNER, G. B. **The British anaesthetic nurse—her role, value, and future.** *Nursing Mirror*, Sutton, 1977, Oct. 6, vol. 145, no. 14, pp. 25-27.

This survey investigates the role of the anaesthetic nurse and attempts to compare it to that of the operating department assistant. The aims of the study were to assess: (i) the need for an anaesthetic nurse as opposed to an operating department assistant; (ii) whether the skills of the anaesthetic nurse are fully used and if not, how could these skills be furthered; (iii) what skills are most useful as opposed to those that take up most of the nurses time; and (iv) the future of the anaesthetic nurse. Data was obtained by two questionnaires: one for anaesthetists and one for anaesthetic nurses and by interviews with both anaesthetists and nurses to discover their attitudes and opinions. Anaesthetists were asked about the relative advantages and disadvantages of nurses and assistants. It was felt that nurses had advantages in that they could deal with drugs, identify possible complications, establish relationships with the patient and had knowledge of a variety of anaesthetic specialities; whilst assistants were more able to cope with machinery, and male assistants could help lift patients. Although anaesthetists felt that relationships and nursing care should be the primary role of the nurse, it was found that they spent most of their time in preparation and cleaning. Ninety-six per cent of the nurses felt that greater use could be made of their skills and that this under-utilization led to their dissatisfaction. It was felt that one way to improve the situation would be to expand the nurses' role.

MORTUARIES AND POST-MORTEM ROOMS

102. EVERETT, P. **The modern post-mortem room.** *Nursing Mirror*, Sutton, 1977, Aug. 25, vol. 145, no. 8, pp. 26-27.

This paper outlines the function, status and training of post-mortem technicians, the design of the post-mortem room, the procedures and techniques used in post-mortems, some legal aspects of death, and the safety of post-mortem technicians. There are two types of mortuaries: hospital, which deal mainly with hospital cases;

and public, which act as coroners' holding houses for identification and forensic cases. The usual mortuary has a refrigerator capable of holding 18 bodies or more. There is also a post-mortem room with three tables and, usually, its own changing room with shower units and WC.

PHARMACY

See also Abstract No. 59

103. BRODIE, D. C. and SMITH, W. E. **How to begin a clinical pharmacy programme.** *Australian Journal of Hospital Pharmacy*, Prahran, 1977, vol. 7, no. 2, pp. 61-65.

A clinical pharmacy programme involves seven requirements: (i) an understanding of the need for clinical pharmacy services (in the context of reality); (ii) a will to change; (iii) adequate manpower; (iv) suitable physical arrangements; (v) a unit dose drug distribution system; (vi) a drug information service; and (vii) administrative support. The services necessary can be grouped into three categories: drug distribution, pharmacist's clinical practice and drug information. At a minimum, the clinical services of the pharmacist should be patient drug therapy monitoring, drug order interpretation, response to physician's and nurses' questions, drug therapy guidelines (protocols) and evaluation of services. Additional desirable services are: patient interviews, participation in emergencies and educational programmes. The impact of clinical pharmacy services on the quality of patient care, cost of care, quality assurance programmes and morale of the hospital staff is discussed.

104. ROBINSON, L. A. and VANDERVEEN, T. W. **Pharmacy-based infusion pump program.** *American Journal of Hospital Pharmacy*, Washington, 1977, July, vol. 34, no. 7, pp. 697-705.

This paper describes the pharmacy-based programme for the procurement, allocation and maintenance of infusion pumps at Medical University Hospital, Charleston, S.C. The problems which led to the establishment of the programme are outlined. Policies and procedures for various facets of the programme, job descriptions for staff and training programmes for pharmacy and nursing staff are discussed. A plan for quality assurance, including in-use accuracy testing, preventive maintenance, repairs and complete record keeping and documentation is outlined. Various aspects of equipment selection, economic justification and revenue generation potential are discussed. It is concluded that an infusion pump programme can be operated successfully by the hospital pharmacy.

105. MILLER, R. R. **Interpretation of studies on adverse drug reactions.** *American Journal of Hospital Pharmacy*, Washington, 1977, July, vol. 34, no. 7, pp. 753-754.

Data from the Boston Collaborative Drug Surveillance Program provide a good estimate of the overall toxicity of drugs both in hospital patients and the community at large. The findings of the programme are summarized and the methodologies of this and other epidemiological drug monitoring projects are defended. It is concluded that the currently available data on adverse drug reactions provide a reasonably complete and clear picture of the problem of adverse drug reactions.

106. CHAST, F. and others. Un nouveau type de distribution journalière individualisée des médicaments: la préparation de monodoses liquides standardisées. **[A new way of distributing drugs on an individualized daily basis: the preparation of standardized monodose liquids.]** *Hôpital à Paris*, Paris, 1977, May/June, no. 39, pp. 269-273.

The authors describe the individualized standardized fluid unit-dose system for drugs which has been in use in the Bicêtre Hospital in Paris for over a year. Each drug dose is pipetted semi-automatically into a re-usable glass container which has a useful volume of 17 ml. and the solution is made up to 15 ml. with the addition of distilled water and 1/1,000 sodium parahydroxybenzoate. Each container is labelled with the patient's name and the name of the medicine. The advantages of this system are described and the account is illustrated with five photographs.

107. FRISK, P. A., COOPER, J. W. and CAMPBELL, N. A. **Community-hospital pharmacist detection of drug-related problems upon patient admission to small hospitals.** *American Journal of Hospital Pharmacy*, Washington, 1977, July, vol. 34, no. 7, pp. 738-742.

A method was developed to increase community/hospital pharmacist consultation on patient drug use in order to detect drug-related problems upon admission to hospital. A medication history was taken on 392 criteria-selected patients admitted to two hospitals in distant, but similar, geographically small and isolated areas. Information on prior drug use was obtained from participating community pharmacists and their patient prescription records and medication profiles. It was found that one in five of the patients had a pre-existing drug-related problem that the admitting physician acknowledged probably contributed to the admission and necessitated professional and patient communication. These problems included: adverse response to prescribed therapy; misuse of medication or non-compliance; effect of diet on therapy; treatment by more than one prescriber; and therapeutic ineffectiveness or inappropriateness of prescribed therapy. Drug histories were not obtainable in 25.6 per cent of the patients.

108. WEST, S. K. and others. **Drug utilization review in an HMO. I. Introduction and examples of methodology.** *Medical Care*, Philadelphia, 1977, vol. 15, no. 6, pp. 505-514.

An experimental drug use review scheme was developed for a health maintenance organization (HMO). The objectives of the scheme were to develop and implement a system for reviewing drug use based on scientific literature and to evaluate the effect of the drug use review scheme on prescribing patterns. Seven categories of drugs were selected. The evaluation of the scheme is based on a comparison of rates of prescription use for specific therapeutic categories before and after the criteria were developed. After the criteria were adopted prescribing of antihistamines for viral upper respiratory infections declined, particularly in paediatrics. In general prescribing of combination antihistamine preparations did not change; where one combination preparation was deleted from the formulary, prescribes appeared to substitute another combination preparation.

109. MILLER, B. R. **The rationale of unit dose drug distribution systems.** *Australian Journal of Hospital Pharmacy*, Prahran, 1977, vol. 7, no. 2, pp. 66-72.

Austin Hospital, Heidelberg, Victoria, has since January 1974 carried out a number of surveys which have collected a great amount of data on nursing time, medication errors and wastage of medication. The results of these are presented in a series of tables and discussed. The overall rationale of unit dose distribution systems is that of patient safety. The safety benefit is evident from the controls and checks, which are an integral part of the system. The patient can only benefit from the checks. The pharmacists' skills are used in the areas of allergies, dosage, route of administration, drug/drug interactions and drug/food interactions.

LABORATORIES

See Abstract Nos. 50, 51

BLOOD TRANSFUSION DEPARTMENT

110. WYCHERLEY, P. A. and BOOTH, E. B. **Blood specimen collection service in Salop.** *Gazette of the Institute of Medical Laboratory Sciences*, London, 1977, Aug., vol. 21, no. 8, pp. 291-293.

This paper describes the development and current organization of the blood specimen collection service covering eight hospitals in Shropshire. It arose primarily from the need to release medical laboratory scientists and to collect ward specimens early in the day, in order to take full advantage of the facilities gained with automated techniques. Part-time blood collectors each work a 14-hour week, the majority on a morning shift. Blood specimens are taken to the pathology department in Shrewsbury either by hospital transport or by the blood collector herself. Staff training, equipment, staff turnover and work load are described. Prerequisites for a successful blood collection service are discussed and its advantages are outlined.

DIAGNOSTIC X-RAY DEPARTMENT

111. FINEBERG, H. V., PARKER, G. S. and PEARLMAN, L. A. **CT scanners: distribution and planning status in the United States.** *New England Journal of Medicine*, Boston, 1977, July 28, vol. 297, no. 4, pp. 216-218.

A survey of all state and some local planning agencies was undertaken in May 1977 to ascertain the present number, distribution and planning status of computerized tomography (CT) scanners in the United States. The results, presented in this paper, show: the extent to which installations are controlled by planning agencies; growth in the number of scanners, including those in the planning stages; applications refused; distribution; and cost. The rate at which CT scanners are installed and the ultimate number in operation will depend primarily on decisions made by four groups: physicians and hospitals seeking to purchase them; planning bodies with authority to approve or deny purchase; third-party payers and other fiscal regulators; and

manufacturers who produce the equipment. The interest of these groups and their likely effect on future developments are discussed.

112. LARSON, E. B. and OMENN, G. S. **The impact of computed tomography on the care of patients with suspected brain tumor.** *Medical Care*, Philadelphia, 1977, July, vol. 15, no. 7, pp. 543-551.

The medical care of 80 patients with suspected brain tumours was analysed to assess the impact of computerized tomography (CT) on their care. Significantly fewer patients received radionuclide brain scans after CT; there were smaller decreases in the percentage of patients receiving cerebral angiograms and pneumonoencephalograms. Although CT accounted for about 40 per cent of charges for neurodiagnostic procedures after CT, reduced use of other neurodiagnostic procedures resulted in similar average costs for neurodiagnostic evaluation. For all three cohorts, length of stay, speed of diagnostic work-up, treatment, and discharge plans were significantly different after CT. There were more patients in the after CT cohorts with a discharge diagnosis associated with specific pathology or demonstrable neurological signs. Conversely, 31 per cent of patients in the before CT cohort had a discharge diagnosis of headache or primary psychiatric problem compared with 11 and four per cent in the after CT cohorts. There were significantly fewer normal angiograms in the after CT cohorts. It is concluded that use of CT did not increase the cost of neurodiagnostic evaluation of these patients apparently because CT substituted for other diagnostic procedures. It is speculated that the pattern of care of patients with suspected brain tumour has changed so that a normal out-patient CT scan eliminates the need for in-patient evaluation of some patients.

113. KNAUS, W. A., SCHROEDER, S. A. and DAVIS, D. O. **Impact of new technology: the CT scanner.** *Medical Care*, Philadelphia, 1977, July, vol. 15, no. 7, pp. 533-542.

Three years after the introduction of computerized tomography (CT) at George Washington University Medical Center, data demonstrated: (i) no change in the frequency of electroencephalography (EEC); (ii) a 14.5 per cent decrease in conventional radionuclide brain scanning (BS); (iii) a decline of 15.6 per cent in the frequency of cerebral arteriograms; and (iv) an 80 per cent decrease in the use of pneumonoencephalography. Demand for CT scanning exceeded that of all other diagnostic procedures combined, and hospital charges for neuroradiological tests increased from $321,410 to $1,314,204 with 93 per cent of the increase attributable to CT. A comparison of 322 patients admitted for cerebrovascular disease or brain tumour before and after introduction of CT revealed that CT significantly reduced the frequency of arteriography within the cerebrovascular diagnosis while also decreasing reliance on EEGs and BS for patients with brain tumours. Within one diagnostic category, for cerebral haemorrhage, the in-patient case analysis suggested that CT improved patient management by reducing the need for surgery and in-patient care. Overall, the combination of the in-patient records and aggregate institutional data suggest that, with the exception of certain data, CT is used in two distinct patterns as a substitute for invasive procedures and as an additional non-invasive screening test.

REHABILITATION

See also Abstract Nos. 135, 137

114. SIMPSON, J. **Rehabilitation and primary care.** *Health Bulletin*, Edinburgh, 1977, July, vol. 35, no. 4, pp. 166-171.

In 1968, when the then Miners' Rehabilitation Centre, Uddingston, became the concern of the Western Regional Hospital Board, the opportunity was taken to reorient the rehabilitation service and to place it in close relationship with the primary care service. The procedure followed is outlined. Results derived from the annual reports of the Medical Rehabilitation Unit from 1968 to 1975 are presented in six tables and discussed. They cover: total number of patients admitted to the unit and the number of severely disabled patients; ages of patients; reasons for admission; period of avoidable delay; duration of treatment; and main causes for admission to rehabilitation programmes. The adoption of a policy of immediate admission to a rehabilitation programme has clearly shown benefit reducing both avoidable delay and duration of treatment. Hospital out-patient departments do not usually permit such rapid access to physical examination and suitable rehabilitation programmes. It is suggested that health centres, in conjunction with the local district general hospital can begin to create a useful, and perhaps an adequate, rehabilitation service. This would require one or more of the health centre's general practitioners to develop an interest in rehabilitation medicine.

DEPARTMENTS FOR SPECIAL THERAPY

See Abstract Nos. 35, 154

INTENSIVE CARE UNITS

See also Abstract Nos. 35, 89, 142

115. TOMLIN, P. J. **Psychological problems in intensive care.** *British Medical Journal*, London, 1977, Aug. 13, vol. ii, pp. 441-443.

The intensive care unit, Queen Elizabeth Hospital, Birmingham, admits about 450 patients a year, suffering from various problems and diseases ranging from postcardiac surgery to polyneuritis. The patients stay on average two to three days, although this varies widely. Over the years the staff have come to recognize several particular psychological problems that these patients have. Simple reactive apathetic depression is extremely common in patients whose stay in the unit is prolonged. A rarer, but more serious, psychological disturbance may occur when the patient is being weaned off the ventilator and has to sleep for the first time without support. Five case studies of this condition are presented. The third type of psychiatric disorder that occurs in intensive care units affects the nursing staff. Three particular problems have been identified: anxiety, exhaustion and communication difficulties. Means of overcoming these are discussed. It is suggested that it will become increasingly necessary to establish in intensive care units psychiatric support services as well as other support services from other disciplines.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract Nos. 14, 49, 128, 147

116. SHONICK, W. and KLEIN, B. W. **An approach to reducing the adverse effects of broken appointments in primary care systems: development of a decision rule based on estimated conditional probabilities.** *Medical Care*, Philadelphia, 1977, May, vol. 15, no. 5, pp. 419-429.

A method is presented for adjusting the scheduling of appointments in ambulatory health care facilities to reduce the deleterious effects of broken appointments. The essence of the method is scheduling an 'expected number' of patients for a given clinic session. This 'expected number' is calculated from estimated probabilities of appointment-breaking, conditioned on patient characteristics which are deemed to be related to appointment-breaking rates, and on which number appointment within a specified time period is being made for the patient. Two ill effects of appointment-breaking are considered: reduction in efficiency of operation and interference with continuity of care. Ways of using the method to ameliorate each of these two effects are outlined, with one of the ways serving to alleviate both effects, identifying 'high risk' patients and taking steps to reconfirm the date and time of their appointments shortly beforehand.

117. KOBASHIGAWA, B. and BERKI, S. E. **Alternative regression approaches to the analysis of medical care survey data.** *Medical Care*, Philadelphia, 1977, May, vol. 15, no. 5, pp. 396-408.

In a multivariate analysis of ambulatory care use in a sub-sample of data from the 1970 National Health Interview Survey, the dependent variables representing use, acute conditions and chronic conditions were found to have discrete variable properties violating normality assumptions of standard regression analysis. Focusing on the use variable, alternative multivariate approaches (Poisson-based multivariate regression, logic analysis and discriminant analysis) were compared with results obtained from standard least squares analysis. While the fixed interval measure of use had an L-shaped frequency distribution with considerable departure from normality, it was found that the more theoretically appropriate, more expensive and more time-consuming alternatives provided only marginal gains over the standard least squares technique.

118. SHORR, G. I. and NUTTING, P. A. **A population-based assessment of the continuity of ambulatory care.** *Medical Care*, Philadelphia, 1977, June, vol. 15, no. 6, pp. 455-464.

A strategy is described in which explicit patient care criteria are used to measure the continuity of the health problem solving process. Prevalent diseases are selected to represent the work load of the health system. Continuity is defined in terms of rates of transition between the major clinical elements: screening, the definitive diagnostic evaluation, treatment, and follow-up evaluation. The results define critical dropout patterns and promote constructive assessment of the health care system.

CASUALTY AND ACCIDENT

See also Abstract Nos. 36, 98, 155

119. HUNTLEY, H. C. **Emergency department visits—a statewide survey.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, July, vol. 6, no. 7, pp. 296-299.

A survey by postal questionnaire of all emergency department visits for one week in November and one week in March was completed by all but one of the 186 hospitals in Florida known to provide emergency services. The results are presented in eight tables and discussed. The estimated number of annual visits appears to exceed national estimates. The concept that in excess of 75 per cent of patients are not true emergencies is not borne out. In spite of changes in the emergency services system, only 10 per cent of patients came by ambulance or rescue vehicle. These patients were more likely to be seriously ill as attested to by the fact that 50 per cent required admission. Definitive care was provided for 80 per cent of patients. Some 40 per cent of Florida's hospitals have full-time emergency physicians. Although nearly 70 per cent of patients were seen by these physicians, 2.4 per cent were seen by interns only, and 10 per cent by house officers only. There was a great variety of referral patterns among the health service agencies.

120. KASZUBA, A. L. and GIBSON, G. **Hospital emergency department surveillance system: a data base for patient care, management, research and teaching.** *Journal of the American College of Emergency Physicians*, Lansing, 1977, July, vol. 6, no. 7, pp. 304-307.

The Johns Hopkins Health Services Research and Development Center and the emergency department, Johns Hopkins Medical Institutions, have developed a processing and feedback system to provide a data base for management planning, allocating available resources, research strategies to evaluate the quality of care, and teaching programmes to train physicians in emergency medicine. A 10 per cent sample of all emergency department visits is randomly selected each day, and data collected on patient age, sex, race, marital status, mode of arrival, method of payment, residence, complaint, diagnosis, disposition, date of visit, and times of arrival and departure. A sub-sample is selected for telephone or household follow-up aimed at gathering outcome data as part of the surveillance study. Time lapse from the patient's visit to the provider's feedback is one month. Thus, an ongoing, current description of use is available. Retrieval of data for longer time periods provides valuable information on daily, monthly and seasonal use patterns.

121. ZUCCARELLI, A.-M. **Flight for Life!** *Hospital Forum*, San Francisco, 1977, April, vol. 19, no. 11, pp. 6-7, 9, 38.

A life-saving helicopter and its staff are part of 'Flight for Life', a medical air service instituted in October 1972 by St. Anthony Hospital Systems, Denver, Colorado. Two helicopters are maintained round the clock, with a third at weekends. Two fixed-wing aircraft are used for flights of over 150 air miles. Patients are taken to the hospital of their choice and not necessarily to St. Anthony's. A communications system at St. Anthony's Central Hospital, Denver, maintains 24-hour contact with 81 agencies

including mountain rescue units and will also answer requests from individual doctors and nurses. The basic patient fee is 65 dollars, but the cost of the system is subsidized by the St. Anthony's group. 'Flight for Life' was used in the Vail Gondola accident and the Big Thompson Canyon flood, the two Colorado disasters of 1976.

122. STEEL, W. M. **The role of the orthopaedic surgeon in the accident and emergency department.** *Injury*, Bristol, 1977, Aug., vol. 9, no. 1, pp. 43-49.

As a result of recent innovations in the staffing and administration of accident and emergency units, the part played by the orthopaedic surgeon in these erstwhile casualty departments has undergone a dramatic change. This paper first reviews important design features, assessment of needs, and the variation in accident and emergency units. It then discusses the allocation of responsibility, staffing by the orthopaedic and accident department, co-ordination of the trauma service and the consultant in administrative charge. From this discussion it is shown that the orthopaedic surgeon has three parts to play in the accident and emergency unit: as manager, co-ordinator and director. Each of these parts is explained.

DAY HOSPITALS

See also Abstract No. 45

123. CHANG, A., ZUKERMAN, L. S. and WALLACE, H. M. **Health services and needs in day care centers.** *Child Welfare*, New York, 1977, July, vol. 56, no. 7, pp. 471-478.

The health care services provided in day care centres for children in Berkeley, California, were surveyed in the summer of 1975. Directors of 52 such centres consented to be interviewed, a percentage response of 88.1 per cent. Thirty centres were totally or partly financed publicly, and 22 were private. Thirty-five centres had written health guidelines and 39 written emergency guidelines. Forty-seven centres had a backup service from the community. Direct services to children on a monthly or more frequent basis were provided in about half the centres by social workers (59.6 per cent), nurses (44.2 per cent), psychologists or psychiatrists (44.2 per cent), speech therapists (40.1 per cent) and community health workers (38.5 per cent). Services by health educators, nutritionists, dentists and paediatricians were provided once a year in less than half the centres. Thirty-seven centres took children with handicaps and ten those with minor illnesses. The centres with state or federal funds and those with a health co-ordinator provided more comprehensive health services than private centres and those without a designated co-ordinator. In agreement with other investigations, this survey revealed a need for improvement in the planning and provision of health services in day care centres for children.

INFECTIOUS DISEASES AND ISOLATION

See also Abstract No. 28

124. TYRRELL, D. A. J. and others. **An isolation unit in a district general hospital.** *British Medical Journal*, London, 1977, Aug. 6, vol. 2, no. 6083, pp. 373-374.

Northwick Park Hospital has a purpose-built isolation unit. One ward of this, comprising 19 beds, was opened first. The rooms and corridor are plenum ventilated, each discharging into an exhaust-ventilated airlock room or lobby between them, thus giving protection against airborne infection in either direction. Gowns, gloves, etc. are kept in the lobby which also has handwashing facilities. This paper reviews the work of the unit from August 1975 to July 1976, the additional work of isolation procedures and the effectiveness of isolation. A few patients received the highest degree of isolation, but infections in all categories were contained and patients at risk in the same unit were protected from infection.

125. RIEMENSNIDER, D. K. and RICHARDS, R. F. **Providing supportive information to the patient in isolation.** *Hospitals*, Chicago, 1977, June 1, vol. 51, no. 11, pp. 103-104, 106.

This paper emphasizes the need for explaining isolation procedures and precautions to the patient and his family. It outlines the type of information which should be given and suggests an educational prescription form (reproduced) which might be used for this purpose. A continuing staff education programme is also necessary.

CHILDREN

See also Abstract Nos. 46, 123, 140

126. DE SILVA, M. G. and ALVAREZ, H. La presencia de la madre en un servicio de pediatria. Labor psicosocial en el hospital Miguel Perez Carreño (Caracas). **[Presence of the mother in a paediatric unit. Psycho-social work in the Miguel Perez Carreño Hospital, Caracas, Venezuela.]** *Courrier*, Paris, 1977, vol. 27, no. 3, pp. 228-231.

For mothers who stay with their children for the duration of their stay in hospital the authors have devised five-day courses on basic hygiene, child care, simple nursing, family planning, a little child psychology, and some aspects of the law relating to women's and children's rights. A paediatrician, a paediatric assistant, and sometimes a nurse and a psychologist take part in the running of these courses, which usually take the form of around table discussion. It is hoped that the courses will help to raise standards of hygiene and child care in the community at large. There are also benefits for the hospital staff insofar as they develop a greater awareness of the social aspects of diseases in children.

127. FRIEDMAN, G. R. **A comprehensive health care center for children.** *Health and Social Work*, Albany, N.Y., 1977, May, vol. 2, no. 2, pp. 158-168.

The Children's Health Center of Minneapolis is a paediatric unit providing in-patient and out-patient care, emergency services and a wide range of specialties from birth through adolescence. Rooming-in arrangements exist for mothers of young children and there is unlimited visiting. The departments of social work, clinical psychology and child psychiatry work together to provide comprehensive care with emphasis on the

emotional well-being of the child. The needs of the families of sick children and a study of parent-child relationships play an important part in staff training. In the neo-natal unit, the social worker helps parents under stress and encourages them to spend as much time in the unit as possible. The centre aims to prevent child abuse, chiefly by identifying high-risk families, and sponsors a state project to help families afflicted by the Sudden Infant Death Syndrome. Some of the hospital's most demanding work is to be found in the life support unit.

128. SOROKER, E. P. **An analysis of pediatric outpatient care.** *Health and Social Work*, Albany, N.Y., 1977, May, vol. 2, no. 2, pp. 89-103.

Studies of 100 children seen in the out-patient department of the Children's Hospital, Pittsburgh, were carried out in 1969 to ascertain the quality of care received. Care given was classified as good, fair or poor, on the basis of information in the patient's record and a follow-up interview with parents. Three-quarters of the patients had physical illnesses, 10 per cent had emotional problems and 14 per cent a combination of both. Treatment was judged to be good in 60 per cent of cases where care was followed through to completion, but was judged to be poor in 24 per cent, 75 per cent of these being associated with emotional problems. In a follow-up to the study which took place 18 months after the initial clinic visit, the parents of 63 out of the 100 children were interviewed. In general, physical problems had been resolved, or anyway improved, but emotional problems or a combination of both tended to persist unchanged. Physicians treated physical illness with the definite aim of a cure, but emotional problems were dealt with in a much vaguer fashion. Detailed results are given in three tables.

129. KIRTEN, C. and LIVERMAN, M. **Special educational needs of the child with cancer.** *Journal of School Health*, Kent, Ohio, 1977, March, vol. 47, no. 3, pp. 170-173.

Once a child's cancer type has been diagnosed he can be given education according to his needs. These needs may vary with different stages and treatment of the disease. School activities should be part of hospital treatment, so that learning problems may be overcome and the child may keep up with his classmates at his regular school. Teachers and medical staff should work out between them the best way of helping the child. Many children with cancer are able to return to normal schooling after discharge from hospital, provided teachers and other pupils understand the changes and limitations imposed on the child. An orthopaedic special education class may be most suitable for a child needing plenty of rest, and a combination of regular school and home teaching may best suit a child who has to make frequent hospital visits. Education at home need not be a lonely process if contact between home pupils is maintained. A home or hospital teacher must have a special enthusiasm to kindle interest.

130. RUTTER, M. and HERSOV, L. A., editors. **Child psychiatry: modern approaches,** Oxford & London, Blackwell Scientific, 1976, xiv, 1024pp. £21.50

This book provides an account of clinical child psychiatry and a knowledge of other disciplines which are relevant to it. Aspects considered include: influences on development; some developmental theories; clinical assessment; clinical syndromes; and approaches to treatment. The findings are applied to the everyday work of the practising clinician and emphasis is based on recent developments and growing points in the subject.

131. BAMFORD, F. M., MINSHALL, P. M. and MOHR, P. D. **An adolescent ward.** *British Medical Journal*, London, 1977, Aug. 20, vol. ii, pp. 503-506.

An adolescent ward, opened at St. Mary's Hospital, Manchester, in April 1974, provides a cheerful environment for the special needs of patients who are neither children nor adults. There are six single rooms, three double and one three-bedded room with communal areas equipped for games and sport. Those patients needing intensive care or who are likely to be a disruptive influence are not admitted. Dental treatment is the commonest cause of admission followed by trauma and orthopaedic problems. Close communication between patients, parents and staff is an important feature of the ward routine. The admitting consultant is responsible for the patients and the ward is supervised by a Sister with a special interest in adolescents. The staff complement is made up of one full-time and two part-time staff nurses and seven student nurses. A mixture of different categories of patients is maintained and not more than 20 per cent long-stay patients are combined with a majority of short-stay patients. Predictions of problems caused by mixing the sexes and several specialties in a single ward have not been realised.

GERIATRICS AND LONG-STAY

See also Abstract Nos. 3, 24, 80, 94, 99, 100

132. EXTON-SMITH, A. N. and EVANS, J. G. **Care of the elderly: meeting the challenge of dependency; proceedings of a conference sponsored jointly by the Institute of Medicine, National Academy of Medicine, Washington, D.C., the Royal Society of Medicine and the Royal Society of Medicine Inc., held at the National Academy of Sciences, Washington, D.C., U.S.A. 17-19 May 1976.** London, Academic Press, 1977, [xi], 312pp. £11.80

This Conference on the Care of the Elderly held at Washington, in 1976, compared the operation of health and social services in the United Kingdom and the United States from a variety of viewpoints. The topics discussed include: the physical and psychological changes associated with the ageing processes and their relationships to clinical manifestations; the effects of mental deterioration resulting from dementia; the demographic characteristics of the ageing population in the United Kingdom and the United States; retirement policies; community and institutional care of the aged; the special needs of the physically handicapped; the prospects for research into gerontology; the need for appropriate attitudes and skills in education and training; and issues of social policy and planning for the future care of the elderly.

133. ALLISON-COOKE, S. and THORNBERRY, H. **Factors affecting nursing home medical review: implications for program and facility planning.** *Medical Care*, Philadelphia, 1977, June, vol. 15, no. 6, pp. 494-504.

A system for the Medical Review of nursing home patients has been fully operational in Rhode Island State since 1973. The study examines recommendations as to the appropriate level of care required by each of 1,309 patients requiring skilled nursing and links these recommendations to the characteristics of the patient and the type of nursing home. Variables measuring the medical condition and the need for skilled nursing were similar to the level of care recommendations of the team of professional

assessors. The results revealed that the relationship between skilled nursing requirements and environment was affected by a reluctance on the part of the review team to physically re-allocate elderly patients; and that long-term care patients with complex medical and social needs might be most appropriately placed in nursing homes which offer a variety of services and several levels of care.

134. CONNELLY, K., COHEN, P. K. and CHAPMAN WALSH, D. **Massachusetts Department of Public Health: periodic medical review: assessing the quality and appropriateness of care in skilled-nursing facilities.** *New England Journal of Medicine*, Boston, Mass., 1977, April 14, vol. 296, no. 15, pp. 878-880.

Periodic Medical Review (PMR) is a state system of reviewing care given to Medicaid patients requiring a high degree of nursing skill. In 1975, PMR reviewed 7,700 patients in 215 Massachusetts nursing homes. Care was judged to be fair or better, and 82 per cent of patients to be suitably placed. Non-profit making homes gave better care than proprietary homes. Information obtained is referred to the Department of Public Welfare for action, and seven out of 13 homes rated poor in both medical and nursing care in 1975 showed improvement in the 1976 review. Patients may be transferred to a different level of care at the instigation of the Department. The principal strengths of PMR are: (i) emphasis on the individual patient; (ii) attention to helping the functional abilities of elderly patients; and (iii) its relatively low cost. The weaker points are: (i) a possible lack of objectivity; and (ii) a failure to look to the future when considering whether a patient is suitably placed.

CANCER

See Abstract No. 129

NEUROLOGY AND NEUROSURGERY

See also Abstract Nos. 112, 113

135. HEWER, R. L. **What's new in stroke rehabilitation?** *Chest, Heart and Stroke Journal*, London, 1977, vol. 2, no. 2, pp. 26-29.

In a population of 200,000 (the approximate number served by one district general hospital) there are likely to be 400 new stroke cases per year, of whom a third will die, a third will recover completely, and a third will be left severely disabled. From the patients' point of view there are four problem areas: (i) stroke patients under 65 who do not qualify for geriatric services; (ii) constraints on mobility, partly caused by a lack of suitable wheelchairs and driving training; (iii) the management of depression and frustration suffered by stroke patients; and (iv) an assessment of upper arm function and the use of new procedures to augment conventional physical therapy. Those who provide health services for the patient need to consider: (i) the high cost of stroke management; (ii) the need to test out costs and effectiveness of different methods of management, for example, hospital as against home care; and (iii) the need to assess the usefulness of various rehabilitation procedures through co-operation between representatives of occupational therapy, physiotherapy, speech therapy, engineering, neurophysiology and neuropsychology.

CARDIOLOGY

136. MATHER, G. **Home care for the coronary patient.** *Mims Magazine*, London, 1977, July, no. 43, pp. 39-40, 43-44, 46.

The use of anticoagulates and admission to a coronary care unit are two aspects of coronary care which may be unnecessary in many cases. Many general practitioners have reported instances of successful treatment of heart attacks in the home, and a study of patients in south-west England showed that among those patients who could equally well be treated at home or in hospital, those treated at home fared equally well, and in some cases better. Indications for home care include: (i) older patients and those in isolated areas; (ii) lack of intensive care facilities at the local hospital; and (iii) cases where the doctor is called some hours after the heart attack. The patient has the advantage of care by his family doctor in familiar surroundings. The most urgent need is for sufficient pain relief which helps to reduce dysrhythmias and shock. Other drug indications are described and access to an electrocardiograph is recommended. Within a week of the attack a progressive programme of exercise can be arranged. Home care is not advisable where a pulse rate below 55 beats per minute is unresponsive to drugs, or the home conditions are not conducive to adequate care.

137. ANDERSON, I. R. M. **Cardiac rehabilitation.** *Chest, Heart and Stroke Journal*, London, 1977, vol. 2, no. 2, pp. 15-18.

A programme of cardiac rehabilitation at the Kent and Sussex Hospital, Tunbridge Wells, was used to discover whether this form of treatment could be undertaken in a National Health general hospital. Patients for the course, who were all under 60 and satisfied the criteria of myocardial infarction, were selected by general physicians at the hospital. The course was explained to the patient and his family at the outset. Equipment was inexpensive and robust and exercising was done in groups of three or four, principally on a cycle ergometer, workloads and time being increased gradually. A target heart rate was set and the patient was monitored continuously. A group of patients who had not taken part in the course were compared with those who had and the latter group had a higher success rate in giving up smoking and regaining physical fitness, but both groups returned to work at much the same time. All those in the rehabilitated group said they had received adequate information about their condition and felt confident about returning to normal life, but only 60 per cent of the control group felt similarly informed and 70 per cent felt the course would have been a great benefit to them. The study showed that wider adoption of such courses in general hospitals could lead to reduced mortality from coronary artery disease.

ORTHOPAEDICS

See Abstract No. 122

MATERNITY

See also Abstract No. 52

138. JOHNSTON, M., KAYNE, M. and MITTLEIDER, K. **Putting more PEP in parenting.** *American Journal of Nursing*, New York, 1977, June, vol. 77, no. 6, pp. 994-995.

This paper describes the patient education programme developed at Los Angeles County/University of Southern California Medical Center, where 1,000 babies are born each month, many of whose mothers speak only Spanish. In an informal educational approach, mobile teaching trolleys are taken to three 40-bed post-natal areas, where bilingual and bicultural volunteers use them in small group discussions. The volunteers were recruited through a community-based consumer organization and prepared at a one-day instructional workshop.

139. GILES, H. R. and others. **The Arizona high-risk maternal transport system: an initial view.** *American Journal of Obstetrics and Gynecology*, St. Louis, 1977, June 15, vol. 128, no. 4, pp. 400-407.

At present Arizona has two level III (or regional or tertiary according to terminology) maternity centres. Maternal transport to these centres is under the auspices of the Arizona Perinatal Program, which provides maternal care, maternal transport, consultation services, communication and data systems, transport for non-routine laboratory speciments, and education (for physicians, patients and public). This paper reports the characteristics of the first 357 patients transported to one of the centres—Arizona Medical Center, Tucson. It covers ethnic background, age, previous pregnancy experience, source of prenatal care, frequency of prenatal visits, indication for transport, associated medical problems, population characteristics, mode of transport, and outcome of maternal transports. The experience to date indicates that maternal transport is workable and does provide increased accessibility, acceptability, comprehensiveness, and increased quality of maternal and neonatal health services. Increasing use of the service indicates that physicians and patients share in this opinion.

140. AYOUB, C. and PFEIFER, D. R. **An approach to primary prevention: the 'At-Risk' program.** *Children Today*, Washington, 1977, May/June, vol. 6, no. 3, pp. 14-17.

In January 1975 Hillcrest Hospital, Tulsa, Okla., organized a multi-disciplinary team to screen suspected child abuse and neglect cases. In 1975 it saw 210 suspected cases and in 1976 investigated 223. In-patient screening of infants and all children begins during the mother's pregnancy, when a child is born or when a child is presented to the paediatric unit for admission. The child and family are assessed in terms of certain at-risk criteria which are listed. When a parent or child is found to meet one or more criteria, the family is interviewed by appropriate members of the team who then provide the necessary support for them. In-patient protocols and teaching programmes have been developed for this purpose. Children from both the paediatric and newborn units, as well as those referred by outside agencies, are accepted into the paediatric at-risk out-patient clinic. The clinic is held weekly and from 20 to 40 patients are seen each time. Five primary objectives have been developed for the programme: (i) to offer co-ordinated and continuous medical care for children first, and secondly for their families; (ii) to increase a family's feelings of personal worth and to provide parents with increased knowledge of health maintenance techniques; (iii) to identify areas of

family stress; (iv) to facilitate referral and feedback; and (v) to evaluate the level of safety of a child in his home.

141. SMITH, J. P. **Brent's integrated paediatric nursing unit.** *Nursing Mirror*, Sutton, 1977, Aug. 4, vol. 145, no. 5, pp. 22-24.

The development of the integrated paediatric nursing unit in Brent Health District, London, is outlined, with particular reference to the problems involved. The unit covers paediatric in-patient and out-patient care, neonatal nursing care, and the appropriate community nursing services. The head of the unit took up her post in April 1976. At the end of 1976 a simple questionnaire was distributed to 29 nursing staff involved in the unit at operational or managerial level. Analysis of the 27 replies suggested that the majority of the respondents considered that the overall quality of care had improved, despite the difficulties caused by staff shortages. The report was circulated and used as a basis of a seminar. Staffing difficulties were noted, minor managerial and geographical problems were also indicated, and possibilities of further improving communications were illustrated. The seminar report will serve as a useful brief for the subsequent six months after which a further review seminar will be convened. The roles of the community nurses in the unit are outlined. Possible future developments are outlined.

142. NORMAN, A. P. **Intensive care for the new born.** *Chest, Heart and Stroke Journal*, London, 1977, vol. 2, no. 2, pp. 3-7.

Figures from various regions in Britain show that economic and social factors have a major effect on the risk of death and handicap in the neonatal period, and where these factors exist there is a greater need for measures to prevent cases of death and damage. The Report of the Expert Group on Special Care for Babies (1971) recommended that babies at risk be cared for either in a special care or an intensive care nursery, the latter being fewer in number and sited in hospitals with special facilities. Women known to be at risk should be admitted to such hospitals before delivery. There should be adequate staff to provide continuous and careful supervision and recommended staffing figures are given for both types of nursery. Gentle handling and temperature maintenance are the first requirements for any baby requiring intensive care, especially those of less than 33 weeks maturity or weighing less than 1,500 grams. Breathing problems present a major difficulty and an electronic monitor should be used to call attention to any cessation in breathing. Blood gases should be monitored and airways kept unobstructed. Mechanical ventilators can be a reliable way of keeping a baby breathing artificially but their operation needs a high degree of skill on the part of doctors, nurses and technicians. Infection is a major risk in the neonatal nursery and staff must be trained in cross-infection techniques. A neonatal unit is expensive to design, equip and run and its justification must rest on its results.

OPHTHALMOLOGY

143. KIDGER, J. **Home visiting scheme for ophthalmic patients.** *Nursing Times*, London, 1977, Aug. 4, vol. 73, no. 31, pp. 1212-1214.

An ophthalmic nurse was appointed in the Central District of the Sheffield Area Health Authority in 1975 to follow up post-operative ophthalmic patients in their homes. Eye patients tend to be elderly and have special post-operative problems and

those who had had lens surgery or an eye removed were considered most suitable for visits. The nurse keeps a careful record of her visits and details of her patients' cases and carries basic ophthalmic equipment with her. Patients are visited initially while still in hospital, following discharge, two weeks later, and, finally, two to three weeks after that, if everything is satisfactory. The eye is examined, drops given as required and a clinic appointment made if the nurse considers it necessary. The ophthalmic nurse liaises with the community nurse to save out-patient clinic time for both patients and doctors. The scheme was extended into the Southern District of the Area Health Authority in June 1976.

DENTISTRY

144. CAMPBELL, R. L. and others. **Exposure to anesthetic waste gas in oral surgery.** *Journal of Oral Surgery*, Chicago, 1977, Aug., vol. 35, no. 8, pp. 625-630.

To quantify levels of nitrous oxide and halothane in the immediate proximity of dental staff, a Miran gas analyser was used to measure infrared energy absorption and to record instantaneous charges on an auxiliary strip chart. Waste gases were measured during general anaesthesia with 70 per cent N_2O, inhalation analgesia with 33 per cent and 42 per cent N_2O, and general anaesthesia with halothane in concentrations from nought to two per cent. A 'typical' time weighted analysis was established for the dental surgeon, assistant and anaesthetist. Values for halothane ranged from 7.5 to 59 ppm and for nitrous oxide from 280 to 90,000 ppm. The implications of these findings are discussed.

PSYCHIATRY

See also Nos. 9, 10, 25, 37, 39, 45, 86, 115, 130

145. WILLIAMS, R. M. **From Bedlam to chaos: are they closing the mental hospitals too soon?** *Psychology Today*, New York, 1977, May, vol. 10, no. 12, pp. 124, 126-129.

Pennsylvania's Department of Public Welfare has announced that it is phasing-out state psychiatric hospitals by releasing large numbers of patients to varying types of community care, starting with Retreat State Mental Hospital. This paper describes the controversy which the plan has aroused in the area and the opposition to it which has come from politicians, from the hospital's staff who fear the loss of their jobs, and from ordinary citizens. A similar situation arose in the San Jose area of California, where the situation was exacerbated when most of the newly discharged patients were found to be in an area about one mile square. Improved control of the establishment of boarding homes and the support of citizen's groups and local mental health organizations has resulted in a considerable improvement in the situation.

146. KILBURG, R. **General systems theory and community mental health: a view from the boiler room.** *International Journal of Mental Health*, White Plains, 1976/77, vol. 5, no. 4, pp. 73-102.

This paper reviews the basic concepts of general systems theory (GST) and provides an overview of some of its applications as described in the literature. It then discusses briefly the major structural elements and possible levels of analysis in the community

mental health movement and finally analyses the current application of the principles of GST by the management and staff of an average community mental health centre. In this centre the principles of GST appear to be in wide use in the daily practice of both clinicians and administrators. Important points which need to be made include: (i) community mental health centres are systems, and as such have a life and process unique to themselves; and (ii) there appear to be no actual data concerning the implementation of GST in mental health or any other field. A list of 75 references to the literature is included.

147. TUCKETT, D. A. **The perspectives of patients referred to a psychiatric out-patient clinic.** (HR1457) London, Social Service Research Council, 1973, 44pp.

The project aimed to increase the knowledge and understanding of the factors involved in a visit to a psychiatric out-patient clinic in Great Britain and the perspectives and expectations of the patients and staff involved. The main research data are based on a series of interviews with 43 patients and professional staff responsible for their treatment. Data were also collected from hospital records. The problems of interviewing are discussed. The study clinic is considered to be typical of a district general hospital but substantive conclusions should be considered more as hypotheses for more sustained investigation than as final results. [Obtainable from the SSRC Library, London.]

148. GORDON, R. E. and others. **Psychiatric problems of the 1970's.** *International Journal of Social Psychiatry*, London, 1976/77, vol. 22, no. 4, pp. 253-264.

Social trends which have influenced psychiatric needs and care in the United States in the 1970's include: (i) the effects of the end of the Vietnam war; (ii) the women's liberation movement; (iii) the improving status of the blacks; and (iv) the migration to the south and south-west of the country. All out-patient and in-patient cases seen from 1968 to 1973 at the Adult Psychiatric Out-patient Clinic of the Shands Teaching Hospital and the Student Mental Health Services of the University of Florida were studied over two periods, 1968 to 1970 and 1971 to 1975. A striking drop in the number of white males seeking psychiatric help occurred following the winding down of the Vietnam war effort. Both black and white women sought more help, with a decline amongst younger women in the later period. The numbers of black women seeking help have increased recently, possibly because their improved status has made them more aware of the services offered. White women remain the largest group of patients (60 per cent) as they were in the 1950's and 1960's, possibly as a result of the pressures of combining a career with family life. Case histories are included for all the categories of patients discussed and detailed results of the study are given in five tables.

149. KUNZE, H. and REIMER, F. Begehungskommissionen für psychiatrische institutionen auch in der Bundesrepublik? **[Should expert groups visit mental institutions in the Federal Republic of Germany?]** *Psychiatrische Praxis*, Stuttgart, 1977, May, vol. 4, no. 2, pp. 104-107.

The authors recommend that a system of visits by experts to psychiatric hospitals, similar to that provided by the Health Advisory Service in England and similar bodies in the United States, should be tried out in Western Germany.

150. ROBINSON, L. **Psychiatric nursing as a human experience.** 2nd edition. Philadelphia & London, W. B. Saunders Co., 1977, ix, 459pp. £8.25

This study of psychiatric nursing is concerned with both the nursing student herself and the patients, their problems and the means of modifying these problems. Aspects considered in the second edition of this text include: the psychiatric nurse as a caring agent; the meaning of mental illness; anxiety; clinical problems and differences in clinical settings; and the problems of the human in distress within a social matrix. Lists of references follow each chapter and a glossary is included.

151. FREYTAG-LORINGHOVEN, E. von. Berufskonzeption und Berufsalltag in der psychiatrischen Krankenpflege—ergebnisse einer empirischen Untersuchung. **[Job conception and actual work conditions in psychiatric nursing.]** *Psychiatrische Praxis*, Stuttgart, 1977, May, vol. 4, no. 2, pp. 94-103.

Questionnaires filled in by 599 members of the nursing staff of psychiatric hospitals in Hessen are analysed and the results set out in eleven statistical tables. The object of the enquiry was to find out from the nurses what they thought about training, job conception, their daily work and further education. The results show a discrepancy between the demands made on nurses by modern psychiatry and the knowledge required during training and job conception. Nurses were on the whole ignorant of, or uninterested in, further training for which in any case opportunity was often lacking. The following recommendations are put forward: student nurses should get proper practical training and not merely serve as ward assistants; an improved basic training in psychiatric nursing is required; a one-year's training in specifically psychiatric nursing is necessary for nursing assistants; refresher courses for all nurses should have a practical content and be obligatory; post-basic training in psychiatry should be accessible to a small number of nurses; each *Land* should have at least one post-basic training school for psychiatric nurses.

152. JONES, K. **Mental health administration: reflections from the British experience.** *Administration in Mental Health*, Rockville, 1977, vol. 4, no. 2, pp. 3-10.

The medical and social care of psychiatric patients is divided between the health and social services in Britain, providing a sharp contrast to the community psychiatric centres in the United States. The ease of admission and discharge under the Mental Health Act, 1959, involved the community mental health service, but successful co-ordination between hospitals and local authorities was short-lived. The re-organization of the personal social services following the Seebohm report in 1968 led to the loss of administrative contact between hospital psychiatrists and psychiatric social workers, who themselves ceased to exist as an independent professional body. On the hospital side, psychiatry became a section of general medicine and the nursing organization was the same for psychiatric and general hospitals alike. There was no special provision for mental health in the creation of the Regional and Area Health Authorities, beyond the level of a mental health care planning team. This policy of integration has led to the breakdown of unity in the mental health field and services for the mentally ill have no senior staff appointments and no specialized training.

153. SCHWARTZ, S. and COCILOVO, V. **Recent census changes in state hospitals: a look below the surface.** *Administration in Mental Health*, Rockville, 1977, vol. 4, no. 2, pp. 11-16.

There was a nine per cent decrease of in-patients in the three major state psychiatric hospitals in Connecticut between 1955 and 1965, followed by a 59 per cent decrease to 1974, a reflection of the national trend in the United States. Connecticut have used a computerized record keeping and information system called Multi State Information System (MSIS), which identifies hospital use and types of patient. Information collected from June 1971 to June 1976 revealed that long hospital stays (five to ten years or longer) have declined the most. Patients in hospital for under one year increased from 53 per cent of the total in 1955-56 to 85 per cent in 1975-76 and this disposition rate shows no sign of decreasing. The percentage of patients in hospital for periods of up to two years has remained level since 1972. Knowledge of disposition and admission rates help in the projection of future census trends provided the rates remain constant. Detailed census figures are given in five tables.

154. ANDRITSCH, F. and REIMER, F. Die regionale Versorgung der Alkoholabhängigen aus der Sicht eines psychiatrischen Krankenhauses in Baden-Württemberg. **[Regional treatment of alcoholics from the viewpoint of a psychiatric hospital in Baden-Württemberg.]** *Öffentliche Gesundheitswesen*, Stuttgart, 1977, July, vol. 39, no. 7, pp. 383-386.

More than 20 per cent of admissions to State psychiatric hospitals in Baden-Württemberg are alcoholics: the hospital at Weinsberg (whose catchment area has a population of nearly 900,000) admits 650 alcoholics annually. Alcoholics need special treatment and it is not satisfactory to admit them to general psychiatric wards. The existing facilities for out-patient after-care and for advice to alcoholics in the Weinsberg catchment area are outlined as well as the in-patient facilities at Weinsberg for short-, medium- and long-term treatment. Some of these facilities are provided by other authorities but it is desirable that the State psychiatric hospitals should have a co-ordinating function. Requirements for Baden-Württemberg as a whole are discussed.

155. GETZ, W. L. and others. **Paraprofessional crisis counseling in the emergency room.** *Health and Social Work*, Albany, N.Y., 1977, May, vol. 2, no. 2, pp. 57-73.

A private hospital in the Pacific Northwest provides an emergency mental health service staffed by 16 student counsellors. The students are carefully selected from Social Science courses, are closely supervised and attend training sessions. They are faced with problems such as suicide attempts, chronic marital difficulties and serious psychotic episodes. The counselling follows a five-step routine: (i) patients are screened and referred by the emergency department doctor; (ii) the patient is interviewed by the counsellor; (iii) the counsellor consults with a supervisor; (iv) an immediate treatment plan is decided upon; and (v) the plan is explained to the patient and a follow-up interview requested. The counsellor must be prepared to call upon supporting help at any time. The cost of the service is a modest 1,300 dollars per month and it has the additional advantage of being available at times when most mental health resources are closed. A study revealed that 85 per cent of patients found the counsellors helpful. Two case histories are described.

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Social Science Research Council, 1 Temple Ave., London EC4Y 0BD.
Whitehall Press, Wrotham Place, Wrotham, Sevenoaks, Kent, England.

Printed in England for Her Majesty's Stationery Office by Holmes & Sons, 10 High Street, Andover, Hants

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ISSN 0018 5507